# KNX solution Catalogue 2017 / 2018

hager

# Your reliable partner for building automation.

# Under one roof



Members of Hager Group

:hager

B. Berker

ELCOM.

DAITEM

diagral

EFEN

BOCCHIOTTI

## One family

The world is changing, and we are changing with it. As a family company, we have grown steadily over the last sixty years to become a reliable partner to expert technicians and electrical wholesalers around the world. All while remaining true to ourselves and to our values. And so we continue today, with a number of well-known brands – each with their own distinctive strengths – working together under the Hager Group umbrella.



**Hager Forum** in Obernai, France, is a place where we can work with customers and partners to shape the future. That makes it a perfect symbol of the innovative power of Hager Group.

hagergroup

## Your trust

As a partner and customer, you can choose from the entire range of products and services offered by every member of our brand family. Our new corporate image highlights our shared strengths even more clearly. From now on, each of our brands will be easily recognisable as a 'Member of Hager Group'. The new corporate image also involves some colour and design changes. Our core promise remains the same: we will always work with you to succeed together.

## Our strengths

We have huge opportunities ahead. The upcoming modernisation of existing buildings, intelligent building technology, digital services, new energy sources and technologies – all of this opens up new, exciting potential for you and for us. At the same time, business requirements are becoming more and more complex. That's why it's so important for you to have Hager Group specialists supporting you with all of their expertise. Together, we are stronger. Together, we will overcome the complex challenges of our time with simple, impressive solutions – just as we have been doing for the last six decades.

# E3

Global warming, a shortage of natural resources, social cohesion and the transition to renewable energy: there are many challenges facing businesses and society today. Hager Group is pursuing a variety of initiatives to promote sustainable development with its “E3” approach.

# Environ

## E for Environment

We work continuously to reduce our carbon footprint. Our priorities include optimising the transport of our products and cutting the amount of energy we use in production to further reduce our Carbon footprint.

# Ethics

## E for Ethics

We need skilled, motivated and healthy employees in order to offer our customers the best services and products. That's why we provide all our team members with a safe, healthy working environment, support their professional growth and offer them opportunities for further development. We also promote diversity and adherence to an Ethics Code throughout the company.

# ment

# Energy

## E for Energy

Hager Group helps its customers to save energy intelligently. We also analyse and optimise our products' environmental performance throughout development and production. By providing a detailed environmental profile for most of our products, we can be fully transparent with our customers and ourselves.

# Technology as a friend



# Hager Design turns technical products into familiar friends.

Before we start designing a new product, we think about the people it is going to serve. Will it assist or entertain, observe or protect, save time or save energy? Ideally, whatever it does, users will feel it is a reliable ‘friend’. We need to know how to connect with people on an emotional level, to ensure that in return they feel connected to our products.



Erwin van Handenhoven
Hager Group Design Director

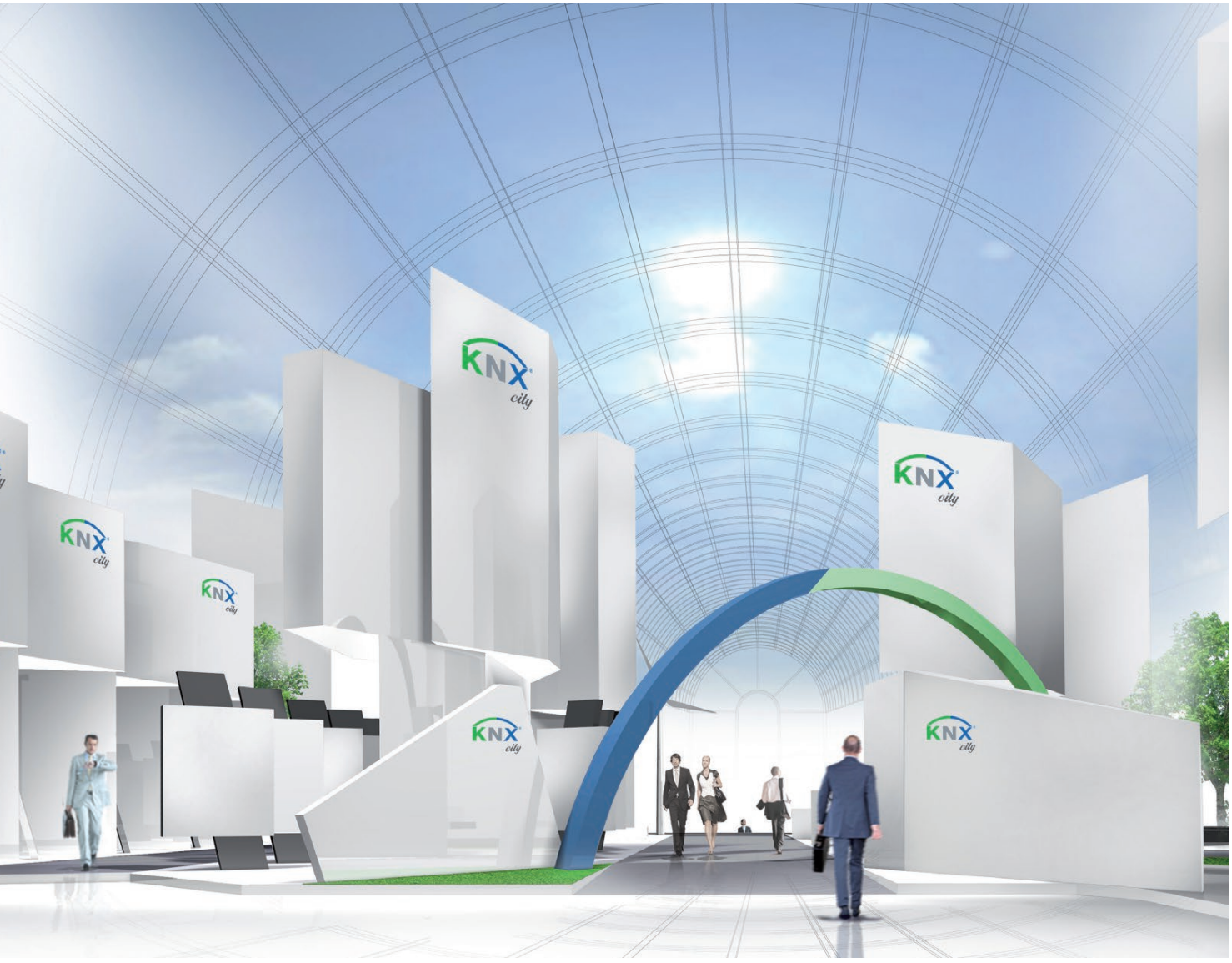
**Technology for people**
Responsible design builds on an ethical foundation. At Hager, this foundation is all about respecting people and caring about their well-being. And it’s not just about today – we want to inspire our customers for years to come. That’s why we include them in every stage of the design process – from installer to planner, to end user.

**An honest brand**
Hager products are world-renowned for their quality, which is visibly and tangibly unveiled in their design. The unmistakeable, explicit and clear brand image tells customers straight away that these products are part of ‘the family’. This is our signature, the Hager DNA, which embodies two central principles.

**Friendly, serene, balanced**
An honest, authentic design that blends naturally into everyday life, without gadgets or cheap effects.

**Ingeniously simple**
Our products are important, but never over-the-top. If it’s not necessary, we leave it out. The essence remains. Straightforward in both form and function: simple to install, simple to use. Simply Hager!

**Looking ahead to the future**
Hager systems are not stagnant – they are expanding, gaining more and more visibility in our customer’s homes. This has implications for our present design language. We call it ‘New Start’. The aim of New Start is to meet our customers where they are, and carry them with us into the future: with innovative ideas, new designs and expressive materials. The new Hager catalogue is full of ‘New Starters’ – along with lots of ‘old friends’. Come and explore!


KNX
city

# KNX
# the strength of a standard.

**Guaranteed compatibility**
For over 20 years, the presence of the KNX logo on products has certified that they communicate perfectly with each other, even when they are offered by different manufacturers. This ensures a high degree of flexibility in the extension and modification of facilities.

**Seamless continuity**
The extent of the KNX community gives the protocol a unique power in the building automation market. Its broad range of products constitutes a set of solutions to meet all situations.

**Openness, a state of mind**
Various gateways are offered by the adherents of KNX to create links with other specification standards such as DALI and BACNET.

**70%**
of the home automation market*

**340**
manufacturers

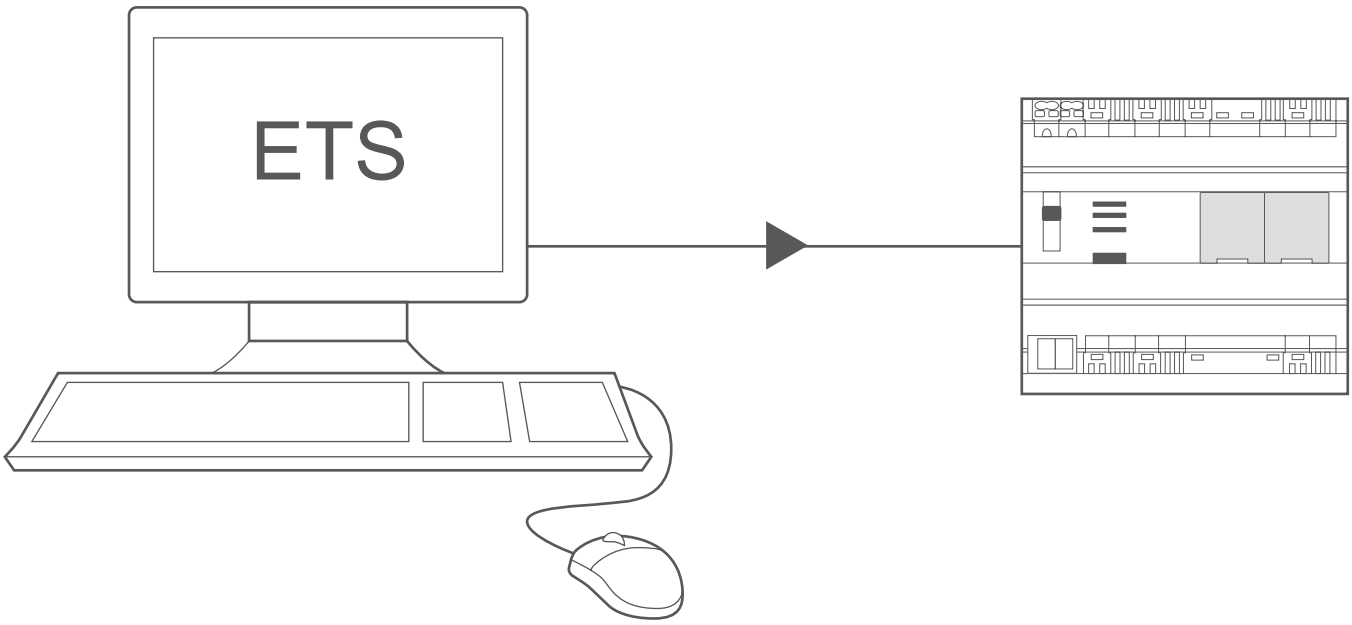
**7000**
products

* Source: knx.org

# System programming
# premium KNX solution

For large-scale and commercial projects requesting a whole range of functionalities, system is the most adapted solution. Our KNX system range has been developped for the most complex and demanding installations. Our wide range of KNX devices offers very advanced configuration possibilities in ETS software. The range of KNX modules consists in output devices for shutters and lighting management as well as binary modules with current measurement.






## Configuration

ETS is the software used for the configuration of every KNX solution. To configure the products, the computer has to be plugged to the installation via a gateway.

The software includes many features, such as:
- easy and quick integration of wireless KNX products in the installation
- user-friendly interface
- simple database
- possibility to track changes related to the project...

## Benefits

- Efficient installation: ETS 5 configuration software has become so simple and intuitive to use for a quick configuration
- A wide range of products to answer all type of projects
- Comfort as its best: possibility to set unlimited number of various scenarios
- Safer installations: would any problem occur, it is possible to troubleshoot easily and quickly

system

# KNX solution catalogue

Visit our website for more information: www.hager.com

# Chapters

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**01 KNX wall-mounted input devices**
Push-buttons / Motion detectors / KNX thermostat / KNX touch control / KNX EnOcean / Sensors / systo KNX / Frames



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156

**09 sepio alarm system**
Control panel / Commands / Intrusion detection / Household detection / Fire protection / Receivers / Transmitters / Sirens / Accessories / Batteries



192

# KNX wall-mounted input devices

There are devices which want to show everyone, all the time, what they can do. And there are those all-rounders, who hide their technical perfection and spacious insert width behind a discreet surface. These include our KNX control sections, which can be integrated easily into our switch range using simply their design or using a frame.



# 01

Page


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## Push-buttons



### Bus application unit flush-mounted

– external temperature sensor

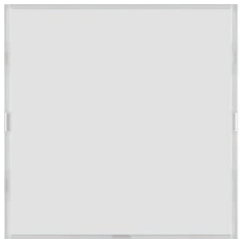


| | |
|---|---|
| Operating voltage over bus | 21 ... 32 V= |
| Operating temperature | - 5 ... + 45 °C |
| Insertion depth | 32 mm |

– with programming button and red programming LED
– additional connection for external temperature sensor
– with integrated buzzer for acoustic identification of the device within the system
– bus connection via connecting terminal
– with spreader claws

| Suitable for | Order no. | Page |
|---|---|---|
| Outdoor temperature sensor | EK088 | 39 |
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| Design | Order no. | PU |
|---|---|---|
| Bus application unit flush-mounted | **8004 00 01** | 1 |
| Bus application unit flush-mounted | **8004 00 11** | 10 |



### Push-button 1gang

– labelling field
– RGB LED
– internal temperature sensor



| | |
|---|---|
| Power consumption, KNX | ≈ 150 mW |
| Operating temperature | - 5 ... + 45 °C |
| Current consumption | 20 mA |

Use only in conjunction with bus coupling unit flush-mounted (order no.: 8004 00 x1)

– with white operating LED
– status LED configurable in 6 colors
– brightness value of the status LED for day/nighttime operation preset, status LED for day/nighttime operation can be controlled via object
– operation LED can be configured via object
– operating concepts for button function and “roller shutter/blind function” predefined
– button functions: switching, dimming, roller shutter/blind, timer, value transmitter 2 byte, thermostat extension unit, priority, scene, automatic control deactivation
– value transmitter for temperature values 2 byte
– switching of up to 64 scenes possible
– parameter defineable lock function
– function for incremental selection of up to 7 stored values
– function for manual interruption of automatic functions already triggered
– integrated temperature sensor with output of the measured values via object
– for bus coupling unit flush-mounted
– alarm telegram after disconnection from bus coupling unit 1 bit or 1 byte
– with anti-dismantling protection

| Suitable for | Order no. | Page |
|---|---|---|
| Bus application unit flush-mounted | 8004 00 .. | 18 |

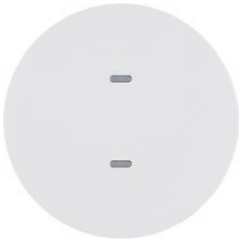


| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| for white and polar white [1] | **8016 17 80** | 1 |
| for anthracite and aluminium [1] | **8016 17 85** | 1 |
| **Berker Q.1/Q.3** | | |
| white [2] | **8014 13 22** | 1 |
| polar white [2] | **8014 13 29** | 1 |
| anthracite [2] | **8014 13 26** | 1 |
| aluminium [2] | **8014 13 21** | 1 |



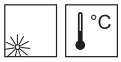
| Design | Order no. | PU |
|---|---|---|
| **Berker K.1/K.5** | | |
| polar white [3] | **8016 17 70** | 1 |
| anthracite [3] | **8016 17 76** | 1 |
| aluminium [3] | **8016 17 74** | 1 |
| stainless steel [3] | **8016 17 73** | 1 |

[1] Labelling field length (W x H): 52.3 x 52.3 mm
[2] Dimensions (W x H): 56.4 x 56.4 mm
[3] Labelling field length (W x H): 66.8 x 52.8 mm
Every label at the right size on: configurator.hager.com



**Push-button 1gang**

- RGB LED
- internal temperature sensor




| | |
|---|---|
| Power consumption, KNX | ≈ 150 mW |
| Operating temperature | - 5 ... + 45 °C |
| Current consumption | 20 mA |

Use only in conjunction with bus coupling unit flush-mounted (order no.: 8004 00 x1)

- with white operating LED
- status LED configurable in 6 colors
- brightness value of the status LED for day/nighttime operation preset, status LED for day/nighttime operation can be controlled via object
- operation LED can be configured via object
- operating concepts for button function and “roller shutter/blind function” predefined
- button functions: switching, dimming, roller shutter/blind, timer, value transmitter 2 byte, thermostat extension unit, priority, scene, automatic control deactivation
- value transmitter for temperature values 2 byte
- switching of up to 64 scenes possible
- parameter defineable lock function
- function for incremental selection of up to 7 stored values
- function for manual interruption of automatic functions already triggered
- integrated temperature sensor with output of the measured values via object
- for bus coupling unit flush-mounted
- alarm telegram after disconnection from bus coupling unit 1 bit or 1 byte
- with anti-dismantling protection

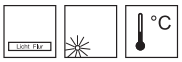
| **Suitable for** | **Order no.** | **Page** |
|---|---|---|
| Bus application unit flush-mounted | 8004 00 .. | 18 |

| Design | Order no. | PU |
|---|---|---|
| **Berker R.1/R.3** | | |
| polar white glossy | **8016 18 69** | 1 |
| black glossy | **8016 18 65** | 1 |



**Push-button 2gang**

- labelling fields
- RGB LED
- internal temperature sensor




| | |
|---|---|
| Power consumption, KNX | ≈ 150 mW |
| Operating temperature | - 5 ... + 45 °C |
| Current consumption | 20 mA |

Use only in conjunction with bus coupling unit flush-mounted (order no.: 8004 00 x1)

- with 2 status LEDs per rocker
- with white operating LED
- status LED configurable in 6 colors
- brightness value of the status LED for day/nighttime operation preset, status LED for day/nighttime operation can be controlled via object
- operation LED can be configured via object
- operating concepts for button function and “roller shutter/blind function” predefined
- button functions: switching, dimming, roller shutter/blind, timer, value transmitter 2 byte, thermostat extension unit, priority, scene, automatic control deactivation
- value transmitter for temperature values 2 byte
- switching of up to 64 scenes possible
- parameter defineable lock function
- function for incremental selection of up to 7 stored values
- function for manual interruption of automatic functions already triggered
- integrated temperature sensor with output of the measured values via object
- for bus coupling unit flush-mounted
- alarm telegram after disconnection from bus coupling unit 1 bit or 1 byte
- with anti-dismantling protection

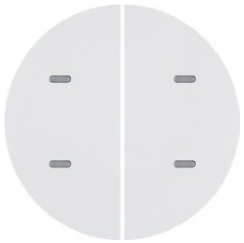
| Suitable for | Order no. | Page |
|---|---|---|
| Bus application unit flush-mounted | 8004 00 .. | 18 |





| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| for white and polar white [1] | **8016 27 80** | 1 |
| for anthracite and aluminium [1] | **8016 27 85** | 1 |
| **Berker Q.1/Q.3** | | |
| white [2] | **8014 23 22** | 1 |
| polar white [2] | **8014 23 29** | 1 |
| anthracite [2] | **8014 23 26** | 1 |
| aluminium [2] | **8014 23 21** | 1 |
| **Berker K.1/K.5** | | |
| polar white [3] | **8016 27 70** | 1 |
| anthracite [3] | **8016 27 76** | 1 |
| aluminium [3] | **8016 27 74** | 1 |
| stainless steel [3] | **8016 27 73** | 1 |

[1] Labelling field length (W x H): 52.3 x 24.9 mm
[2] Dimensions (W x H): 56.4 x 26.8 mm
[3] Labelling field length (W x H): 66.8 x 25 mm
Every label at the right size on: configurator.hager.com



**Push-button 2gang**

– RGB LED
– internal temperature sensor

| | |
|---|---|
| Power consumption, KNX | ≈ 150 mW |
| Operating temperature | - 5 ... + 45 °C |
| Current consumption | 20 mA |

Use only in conjunction with bus coupling unit flush-mounted (order no.: 8004 00 x1)

– with white operating LED
– status LED configurable in 6 colors
– brightness value of the status LED for day/nighttime operation preset, status LED for day/nighttime operation can be controlled via object
– operation LED can be configured via object
– operating concepts for button function and “roller shutter/blind function” predefined
– button functions: switching, dimming, roller shutter/blind, timer, value transmitter 2 byte, thermostat extension unit, priority, scene, automatic control deactivation
– value transmitter for temperature values 2 byte
– switching of up to 64 scenes possible
– parameter defineable lock function
– function for incremental selection of up to 7 stored values
– function for manual interruption of automatic functions already triggered
– integrated temperature sensor with output of the measured values via object
– for bus coupling unit flush-mounted
– alarm telegram after disconnection from bus coupling unit 1 bit or 1 byte
– with anti-dismantling protection

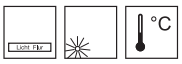
| **Suitable for** | **Order no.** | **Page** |
|---|---|---|
| Bus application unit flush-mounted | 8004 00 .. | 18 |

| Design | Order no. | PU |
|---|---|---|
| **Berker R.1/R.3** | | |
| polar white glossy | **8016 28 69** | 1 |
| black glossy | **8016 28 65** | 1 |



**Push-button 3gang**

- labelling fields
- RGB LED
- internal temperature sensor




| | |
|---|---|
| Power consumption, KNX | ≈ 150 mW |
| Operating temperature | - 5 ... + 45 °C |
| Current consumption | 20 mA |

Use only in conjunction with bus coupling unit flush-mounted (order no.: 8004 00 x1)

- with 2 status LEDs per rocker
- with white operating LED
- status LED configurable in 6 colors
- brightness value of the status LED for day/nighttime operation preset, status LED for day/nighttime operation can be controlled via object
- operation LED can be configured via object
- operating concepts for button function and “roller shutter/blind function” predefined
- button functions: switching, dimming, roller shutter/blind, timer, value transmitter 2 byte, thermostat extension unit, priority, scene, automatic control deactivation
- value transmitter for temperature values 2 byte
- switching of up to 64 scenes possible
- parameter defineable lock function
- function for incremental selection of up to 7 stored values
- function for manual interruption of automatic functions already triggered
- integrated temperature sensor with output of the measured values via object
- for bus coupling unit flush-mounted
- alarm telegram after disconnection from bus coupling unit 1 bit or 1 byte
- with anti-dismantling protection

| Suitable for | Order no. | Page |
|---|---|---|
| Bus application unit flush-mounted | 8004 00 .. | 18 |





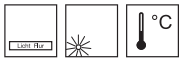
| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| for white and polar white [1] | **8016 37 80** | 1 |
| for anthracite and aluminium [1] | **8016 37 85** | 1 |
| **Berker Q.1/Q.3** | | |
| white [2] | **8014 33 22** | 1 |
| polar white [2] | **8014 33 29** | 1 |
| anthracite [2] | **8014 33 26** | 1 |
| aluminium [2] | **8014 33 21** | 1 |
| **Berker K.1/K.5** | | |
| polar white [3] | **8016 37 70** | 1 |
| anthracite [3] | **8016 37 76** | 1 |
| aluminium [3] | **8016 37 74** | 1 |
| stainless steel [3] | **8016 37 73** | 1 |

[1] Labelling field length (W x H): 52.3 x 15.6 mm
[2] Dimensions (W x H): 56.4 x 17 mm
[3] Labelling field length (W x H): 66.8 x 15.7 mm
Every label at the right size on: configurator.hager.com



**Push-button 4gang**

- labelling fields
- RGB LED
- internal temperature sensor




| | |
|---|---|
| Power consumption, KNX | ≈ 150 mW |
| Operating temperature | - 5 ... + 45 °C |
| Current consumption | 20 mA |

Use only in conjunction with bus coupling unit flush-mounted (order no.: 8004 00 x1)
In the design line S.1/B.x and K.x only use in conjunction with a frame with large cut-out

- with 2 status LEDs per rocker
- with white operating LED
- status LED configurable in 6 colors
- brightness value of the status LED for day/nighttime operation preset, status LED for day/nighttime operation can be controlled via object
- operation LED can be configured via object
- operating concepts for button function and “roller shutter/blind function” predefined
- button functions: switching, dimming, roller shutter/blind, timer, value transmitter 2 byte, thermostat extension unit, priority, scene, automatic control deactivation
- value transmitter for temperature values 2 byte
- switching of up to 64 scenes possible
- parameter defineable lock function
- function for incremental selection of up to 7 stored values
- function for manual interruption of automatic functions already triggered
- integrated temperature sensor with output of the measured values via object
- for bus coupling unit flush-mounted
- alarm telegram after disconnection from bus coupling unit 1 bit or 1 byte
- with anti-dismantling protection

| Suitable for | Order no. | Page |
|---|---|---|
| Bus application unit flush-mounted | 8004 00 .. | 18 |





| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| for white and polar white [1] | **8016 47 80** | 1 |
| for anthracite and aluminium [1] | **8016 47 85** | 1 |
| **Berker Q.1/Q.3** | | |
| white [2] | **8014 43 22** | 1 |
| polar white [2] | **8014 43 29** | 1 |
| anthracite [2] | **8014 43 26** | 1 |
| aluminium [2] | **8014 43 21** | 1 |
| **Berker K.1/K.5** | | |
| polar white [3] | **8016 47 70** | 1 |
| anthracite [3] | **8016 47 76** | 1 |
| aluminium [3] | **8016 47 74** | 1 |
| stainless steel [3] | **8016 47 73** | 1 |

[1] Labelling field length (W x H): 52.3 x 24.9 mm
[2] Dimensions (W x H): 56.4 x 12 mm
[3] Labelling field length (W x H): 66.8 x 25 mm
Every label at the right size on: configurator.hager.com

## Push-buttons with thermostat




### Bus coupling unit flush-mounted

| | |
|---|---|
| Operating voltage over bus | 21 ... 32 V= |
| Power consumption, KNX | ≈ 100 mW |
| Operating temperature | -5 ... +45 °C |
| Insertion depth | 23 mm |

- with programming button and red programming LED
- as interface between KNX user module and bus line
- bus connection via connecting terminal
- without spreader claws

| Design | Order no. | PU |
|---|---|---|
| Bus coupling unit flush-mounted | **7504 00 01** | 1 |

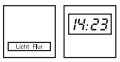
### Berker S.1/B.3/B.7, K.1/K.5 - push-buttons with thermostat

- For switch, push-button, dimmer, blind and thermostat functions
- Single and two push-button operation configurable
- One push-button operation for switching, push-buttons, blinds and dimming
- Extension unit for light scene push-button
- For individual single room temperature control
- For heating and/or cooling mode with/without auxiliary step
- Controller operating modes: comfort, standby, night and frost/heat protection mode
- LC display with symbol display
- With 2 additional function buttons for display control
- Display of operating mode, controller lockout, room and outside temperature as well as time in connection with a clock
- Temperature measurement via internal and/or external temperature sensor with mean value formation
- With room temperature timer
- For installation in single standard wall boxes
- For continuous (PI) or switched (2-point) control of max. 2 control circuits
- With dismantling protection
- With button blocking function
- End customer display scope
- Separate object for window contact
- Programmable from ETS2, V1.2a
- Alarm telegram after disconnection from bus coupling unit 1 bit or 1 byte
- Presence button configurable to extend comfort
- Value transmitter for dimming, position, brightness and temperature values 1 and 2 byte




### Push-button 2gang with thermostat

- labelling fields
- display




- with white operation LED and 4 red status LEDs

| Suitable for | Order no. | Page |
|---|---|---|
| Bus coupling unit flush-mounted | 7504 00 01 | 24 |

Operating temperature -5 ... +45 °C



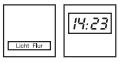
| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| for white and polar white [1] | **7566 27 80** | 1 |
| for anthracite and aluminium [1] | **7566 27 85** | 1 |
| **Berker K.1/K.5** | | |
| polar white [2] | **7566 27 70** | 1 |
| anthracite [2] | **7566 27 75** | 1 |
| aluminium [2] | **7566 27 74** | 1 |
| stainless steel [2] | **7566 27 73** | 1 |

[1] labelling field length (W x H): 52.3 x 15.6 mm
[2] labelling field length (W x H): 66.8 x 15.7 mm
Every label at the right size on: configurator.hager.com



**Push-button 3gang with thermostat**

- labelling fields
- display



Operating temperature -5 ... +45 °C

Use only in combination with frame with large cut-out.

– with white operation LED and 6 red status LEDs

| Suitable for | Order no. | Page |
|---|---|---|
| Bus coupling unit flush-mounted | 7504 00 01 | 24 |



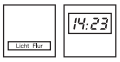
| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| for white and polar white [1] | **7566 37 80** | 1 |
| for anthracite and aluminium [1] | **7566 37 85** | 1 |
| **Berker K.1/K.5** | | |
| polar white [2] | **7566 37 70** | 1 |
| anthracite [2] | **7566 37 75** | 1 |
| aluminium [2] | **7566 37 74** | 1 |
| stainless steel [2] | **7566 37 73** | 1 |

[1] labelling field length (W x H): 52.3 x 24.9 mm
[2] labelling field length (W x H): 66.8 x 25 mm
Every label at the right size on:
configurator.hager.com



**Push-button 5gang with thermostat**

- labelling fields
- display



Operating temperature -5 ... +45 °C

Use only in combination with frame with large cut-out.

– with white operation LED and 10 red status LEDs

| Suitable for | Order no. | Page |
|---|---|---|
| Bus coupling unit flush-mounted | 7504 00 01 | 24 |

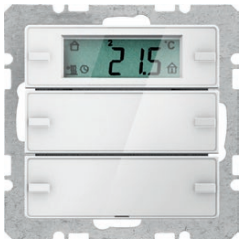


| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| for white and polar white [1] | **7566 57 80** | 1 |
| for anthracite and aluminium [1] | **7566 57 85** | 1 |
| **Berker K.1/K.5** | | |
| polar white [2] | **7566 57 70** | 1 |
| anthracite [2] | **7566 57 75** | 1 |
| aluminium [2] | **7566 57 74** | 1 |
| stainless steel [2] | **7566 57 73** | 1 |

[1] labelling field length (W x H): 52.3 x 15.6 mm
[2] labelling field length (W x H): 66.8 x 15.7 mm
Every label at the right size on:
configurator.hager.com

## Berker Q.1/Q.3 - push-buttons with thermostat and bus coupling unit

- For switch, push-button, dimmer, blind and thermostat functions
- Single and two push-button operation parameterisable
- One push-button operation for switching, push-buttons, blinds and dimming
- Extension unit for light scene push-button
- For retrieval, saving and setting of 8 light scenes
- For individual single room temperature control
- For heating and/or cooling mode with/without auxiliary step
- Controller operating modes: comfort, standby, night and frost/heat protection mode
- LC display with symbol display
- With 2 additional function buttons for display control
- Display of operating mode, controller lockout, room and outside temperature as well as time in connection with a clock
- Temperature measurement via internal and/or external temperature sensor with mean value formation
- With room temperature timer
- For installation in single standard wall boxes
- For continuous (PI) or switched (2-point) control of max. 2 control circuits
- With dismantling protection
- With button blocking function
- End customer display scope parameterisable
- Separate object for window contact
- Programmable from ETS2, V1.2a
- Alarm telegram after disconnection from bus coupling unit 1 bit or 1 byte
- Presence button parameterisable to extend comfort
- Value transmitter for dimming, position, brightness and temperature values 1 and 2 byte



### Push-button 2gang with thermostat

- labelling fields
- display
- integrated bus coupling unit



Operating temperature -5 ... +45 °C
Labelling field length (W x H) 56.4 x 17 mm

– with white operation LED and 4 amber status LEDs

| Suitable for replacement | Order no. | Page |
|---|---|---|
| Labelling field foils for push-buttons 3gang, 2-/5gang with thermostat | 9498 31 03 | 27 |

| Design | Order no. | PU |
|---|---|---|
| **Berker Q.1/Q.3** | | |
| white velvety | **7566 27 22** | 1 |
| polar white velvety | **7566 27 29** | 1 |
| anthracite velvety | **7566 27 26** | 1 |



### Push-button 3gang with thermostat

- labelling fields
- display
- integrated bus coupling unit



Operating temperature -5 ... +45 °C
Labelling field length (W x H) 56.4 x 26.8 mm

Use only in combination with frame with large cut-out.

– with white operation LED and 6 amber status LEDs

| Suitable for replacement | Order no. | Page |
|---|---|---|
| Labelling field foils for push-buttons 2gang, 3gang with thermostat | 9498 30 02 | 27 |

| Design | Order no. | PU |
|---|---|---|
| **Berker Q.1/Q.3** | | |
| white velvety | **7566 37 22** | 1 |
| polar white velvety | **7566 37 29** | 1 |
| anthracite velvety | **7566 37 26** | 1 |



**Push-button 5gang with thermostat**

- labelling fields
- display
- integrated bus coupling unit



Operating temperature -5 ... +45 °C
Labelling field length (W x H) 56.4 x 17 mm

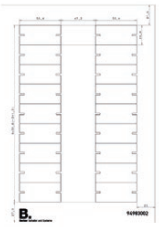
Use only in combination with frame with large cut-out.

– with white operation LED and 10 amber status LEDs

| Suitable for replacement | Order no. | Page |
|---|---|---|
| Labelling field foils for push-buttons 3gang, 2-/5gang with thermostat | 9498 31 03 | 27 |

| Design | Order no. | PU |
|---|---|---|
| **Berker Q.1/Q.3** | | |
| white velvety | **7566 57 22** | 1 |
| polar white velvety | **7566 57 29** | 1 |
| anthracite velvety | **7566 57 26** | 1 |

## Berker Q.1/Q.3 - accessories



**Labelling field foils for push-buttons 2gang, 3gang with thermostat**

Suitable for inkjet and laser printers.
UV-resistant.

– foil with 18 fields

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 2 .. | 26 |

| Design | Order no. | PU |
|---|---|---|
| polar white | **9498 30 02** | 1 |



**Labelling field foils for push-buttons 3gang, 2-/5gang with thermostat**

– foil with 30 fields

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 2gang with thermostat | 7566 27 2 .. | 26 |
| Push-button 5gang with thermostat | 7566 57 2 .. | 27 |

| Design | Order no. | PU |
|---|---|---|
| polar white | **9498 31 03** | 1 |

Customise your own label, always at the right size, using our configuration tool:
configurator.hager.com

## Push-button with bus coupling unit

### Push-button modules



**Push-button module 1gang**

- RGB LED
- internal temperature sensor
- integrated bus coupling unit

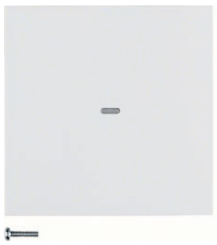
| | |
|---|---|
| Operating voltage over bus | 21 ... 32 V= |
| Current consumption | 10 mA |
| Operating temperature | - 5 ... + 45 °C |
| Insertion depth | 32 mm |

- status LED configurable in 6 colors
- brightness value of the status LED for day/nighttime operation preset, status LED for day/nighttime operation can be controlled via object
- operation LED can be configured via object
- operating concepts for button function and “roller shutter/blind function” predefined
- push-button functions: switching, dimming, roller shutter/blind, value transmitter 2 byte, thermostat, scene, priority
- value transmitter for temperature values 2 byte
- parameter defineable lock function
- function for manual interruption of automatic functions already triggered
- with programming button and red programming LED
- integrated temperature sensor with output of the measured values via object
- with integrated bus coupling unit
- bus connection via connecting terminal
- with anti-dismantling protection
- with integrated buzzer for acoustic identification of the device within the system

| Suitable for | Order no. | Page |
|---|---|---|
| Cover for 1-gang push-button module | 8096 02 .. | 28 |
| Temperature sensor | EK090 | 40 |
| **Optional** | | |
| Outdoor sensor | EK088 | 39 |



| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| Push-button module 1gang | **8014 11 80** | 1 |
| **Berker Q.1/Q.3, K.1/K.5** | | |
| Push-button module 1gang | **8014 11 70** | 1 |



**Cover for 1gang push-button module**

- clear lens
- with clear lens for RGB status display of the push-button module

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button module 1-gang | 8014 11 .. | 28 |

| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **8096 02 82** | 1 |
| polar white glossy | **8096 02 89** | 1 |
| polar white, matt, plastic | **8096 02 99** | 1 |
| anthracite, matt | **8096 02 85** | 1 |
| aluminium, matt, lacquered | **8096 02 83** | 1 |
| **Berker Q.1/Q.3** | | |
| white velvety | **8096 02 22** | 1 |
| polar white velvety | **8096 02 29** | 1 |
| anthracite velvety, lacquered | **8096 02 26** | 1 |
| aluminium velvety, lacquered | **8096 02 21** | 1 |
| **Berker K.1/K.5** | | |
| polar white glossy | **8096 02 79** | 1 |
| anthracite, matt | **8096 02 75** | 1 |
| aluminium, matt, lacquered | **8096 02 71** | 1 |
| stainless steel matt, lacquered | **8096 02 73** | 1 |



### Push-button module 2gang

- RGB LED
- internal temperature sensor
- integrated bus coupling unit

| | |
|---|---|
| Operating voltage over bus | 21 ... 32 V= |
| Current consumption | 10 mA |
| Operating temperature | - 5 ... + 45 °C |
| Insertion depth | 32 mm |

- status LED configurable in 6 colors
- brightness value of the status LED for day/nighttime operation preset, status LED for day/nighttime operation can be controlled via object
- operation LED can be configured via object
- operating concepts for button function and “roller shutter/blind function” predefined
- push-button functions: switching, dimming, roller shutter/blind, value transmitter 2 byte, thermostat, scene, priority
- value transmitter for temperature values 2 byte
- parameter defineable lock function
- function for manual interruption of automatic functions already triggered
- with programming button and red programming LED
- integrated temperature sensor with output of the measured values via object
- with integrated bus coupling unit
- bus connection via connecting terminal
- with anti-dismantling protection

  with integrated buzzer for acoustic identification of the device within the system

| Suitable for | Order no. | Page |
|---|---|---|
| Cover for 2-gang push-button module | 8096 03 .. | 29 |
| Temperature sensor | EK090 | 40 |
| **Optional** | | |
| Outdoor sensor | EK088 | 39 |

| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| Push-button module 2gang | **8014 21 80** | 1 |
| **Berker Q.1/Q.3, K.1/K.5** | | |
| Push-button module 2gang | **8014 21 70** | 1 |





### Cover for 2gang push-button module

- clear lenses

- with 2 clear lenses for the RGB status display of the push-button module

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button module 2-gang | 8014 21 .. | 29 |

| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **8096 03 82** | 1 |
| polar white glossy | **8096 03 89** | 1 |
| polar white, matt, plastic | **8096 03 99** | 1 |
| anthracite, matt | **8096 03 85** | 1 |
| aluminium, matt, lacquered | **8096 03 83** | 1 |
| **Berker Q.1/Q.3** | | |
| white velvety | **8096 03 22** | 1 |
| polar white velvety | **8096 03 29** | 1 |
| anthracite velvety, lacquered | **8096 03 26** | 1 |
| aluminium velvety, lacquered | **8096 03 21** | 1 |
| **Berker K.1/K.5** | | |
| polar white glossy | **8096 03 79** | 1 |
| anthracite, matt | **8096 03 75** | 1 |
| aluminium, matt, lacquered | **8096 03 71** | 1 |
| stainless steel matt, lacquered | **8096 03 73** | 1 |

## Motion detectors

### KNX motion detector



**KNX motion detector module 1.1 m**

- internal temperature sensor
- integrated bus coupling unit

| | |
|---|---|
| Operating voltage over bus | 21 ... 32 V= |
| Current consumption KNX | max. 10 mA |
| Nominal mounting height | 1.1 m |
| Delay time, adjustable | 10 s ... 30 min |
| Response brightness, adjustable | ≈ 5...1000 lx, ∞ lx (day) |
| Detection angle, settable | each side ≈ 45 ... 90 ° |
| Detection field, rectangular shaped | ≈ 12 x 16 m |
| Operating temperature | - 5 ... + 45 °C |

Automatic triggering of bus functions for movement within the detection area or manual control via integrated button.

Continuous direct sunlight penetrating the upward-pointing detection plane can result in failure of the motion detector.
Only suitable for indoor areas!

- with 3 operating modes: automatic/permanent ON/permanent OFF
- Master/Slave operation for covering large detection areas
- with test mode
- with button for automatic/permanent ON/permanent OFF
- operating mode display via status LED, red/green/orange
- two function channels for brightness-dependent functions
- additional channel for independent of brightness detector mode
- output of the brightness value via object possible
- with integrated bus coupling unit
- bus connection via connecting terminal
- with dismantling protection

| Suitable for | Order no. | Page |
|---|---|---|
| Cover for KNX motion detector module | 8096 04 .. | 31 |

| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| KNX motion detector module 1.1 m | **8026 21 80** | 1 |
| **Berker Q.1/Q.3, K.1/K.5** | | |
| KNX motion detector module 1.1 m | **8026 21 70** | 1 |
| **Berker R.1/R.3** | | |
| KNX motion detector module 1.1 m | **8026 21 60** | 1 |







**KNX motion detector module 2.2 m**

– internal temperature sensor
– integrated bus coupling unit

| | |
|---|---|
| Operating voltage over bus | 21 ... 32 V= |
| Current consumption KNX | max. 10 mA |
| Nominal mounting height | 2.2 m |
| Delay time, adjustable | 10 s ... 30 min |
| Response brightness, adjustable | ≈ 5...1000 lx, ∞ lx (day) |
| Detection angle, settable | each side ≈ 45 ... 90 ° |
| Detection field, rectangular shaped | ≈ 8 x 12 m |
| Operating temperature | - 5 ... + 45 °C |

Automatic triggering of bus functions for movement within the detection area or manual control via integrated button.

Continuous direct sunlight penetrating the upward-pointing detection plane can result in failure of the motion detector.
Only suitable for indoor areas!

– with 3 operating modes: automatic/permanent ON/permanent OFF
– Master/Slave operation for covering large detection areas
– with test mode
– with button for automatic/permanent ON/permanent OFF
– operating mode display via status LED, red/green/orange
– two function channels for brightness-dependent functions
– additional channel for independent of brightness detector mode
– output of the brightness value via object possible
– with integrated bus coupling unit
– bus connection via connecting terminal
– with dismantling protection

| Suitable for | Order no. | Page |
|---|---|---|
| Cover for KNX motion detector module | 8096 04 .. | 31 |

| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| KNX motion detector module 2.2 m | **8026 22 80** | 1 |
| **Berker Q.1/Q.3, K.1/K.5** | | |
| KNX motion detector module 2.2 m | **8026 22 70** | 1 |





| | | |
|---|---|---|
| **Berker R.1/R.3** | | |
| KNX motion detector module 2.2 m | **8026 22 60** | 1 |



**Cover for KNX motion detector module**

| Suitable for | Order no. | Page |
|---|---|---|
| KNX motion detector module 1.1 m | 8026 21 .. | 30 |
| KNX motion detector module 2.2 m | 8026 22 .. | 31 |

| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **8096 04 52** | 1 |
| polar white glossy | **8096 04 59** | 1 |
| anthracite, matt | **8096 04 85** | 1 |
| aluminium, matt, lacquered | **8096 04 83** | 1 |
| polar white matt | **8096 04 09** | 1 |



| | | |
|---|---|---|
| **Berker Q.1/Q.3** | | |
| white velvety | **8096 04 22** | 1 |
| polar white velvety | **8096 04 29** | 1 |
| anthracite velvety, lacquered | **8096 04 26** | 1 |
| aluminium velvety, lacquered | **8096 04 21** | 1 |



| | | |
|---|---|---|
| **Berker K.1/K.5** | | |
| polar white glossy | **8096 04 79** | 1 |
| anthracite, matt | **8096 04 75** | 1 |
| aluminium, matt, lacquered | **8096 04 71** | 1 |
| stainless steel matt, lacquered | **8096 04 73** | 1 |



| Design | Order no. | PU |
|---|---|---|
| **Berker R.1/R.3** | | |
| polar white glossy | **8096 04 60** | 1 |
| black glossy | **8096 04 65** | 1 |



**KNX motion detector module comfort 1.1 - integrated bus coupling unit**

| | |
|---|---|
| Operating voltage over bus | 21 ... 29 V= |
| Nominal mounting height | 1.1 m |
| Delay time adjustable | 1 ... 30 min |
| Response brightness, adjustable | ≈ 5 to 1000 lux |
| Detection field, rectangular shaped | ≈ 10 x 10 m |
| Operating temperature | -5°C ... +45°C |

Continuous direct sunlight penetrating the upward-pointng detection plane can result in failure of the motion detector. Only suitable for indoor areas!

Automatic triggering of bus functions for movement within the detection area or manual control via integrated button.

- push-button function: switching functions, dimming functions, blind control functions, value transmitter functions, forced control functions, scene functions
- specification of the controller operating mode
- operating mode display via status LED, red/green/orange
- operating modes: automatic, permanent ON, ON for 2 hours, permanent OFF
- two separated function channels for brightness-dependent and brightness-independent functions
- integrated button for manual control of bus functions can be configured
- with button for automatic/permanent ON/ON for 2 hours/permanent OFF
- bus connection via connecting terminal
- with dismanting protection

| **Suitable for** | **Order no.** | **Page** |
|---|---|---|
| Cover for KNX motion detector module | 7596 28 6. | 32 |

| Design | Order no. | PU |
|---|---|---|
| KNX motion dectector module comfort 1.1 m | **7524 20 60** | 1 |



**Cover for KNX motion detector module**

| **Suitable for** | **Order no.** | **Page** |
|---|---|---|
| KNX motion detector module comfort 1.1 m | 7524 20 60 | 32 |

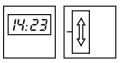
| Design | Order no. | PU |
|---|---|---|
| **Berker R.1/R.3** | | |
| polar white glossy | **7596 28 69** | 1 |
| black glossy | **7596 28 65** | 1 |

## KNX thermostat and room controller



**KNX thermostat**

– display
– integrated bus coupling unit




| | |
|---|---|
| Operating voltage over bus | 21 ... 32 V= |
| Auxiliary voltage | 24 V= |
| Energy efficiency class | IV (2%) |
| TFT screen size | 1.93" |
| Operating temperature | - 5 ... + 45 °C |
| Dimensions of display (W x H) | 38.3 x 30.3 mm |
| Insertion depth | 32 mm |

– for individual single room temperature control
– control parameter for heating/cooling unit pre-set
– operating mode heating, cooling or heating/cooling can be selected
– comfort, standby, night-time reduction, frost/heat protection operating mode switchable via scene
– switching PI-control (PWM) or switching 2-point control can be selected
– heating type warm water heating, warm water underfloor heating, electric heating, electric underfloor heating or split unit can be selected
– cooling type cooling ceiling, convector fan or split unit can be selected
– switching of up to 64 scenes possible
– with keylock
– with holiday switching
– with frost protection function
– additional connection for external temperature sensor
– temperature measurement via internal, external temperature sensor or via object and their mean value formation
– temperature adjustable for comfort, standby and night-time reduction
– operation via sensitive Touch control surface
– to display and initiate actions
– display of operating mode, controller lockout, room/outside temperature, time
– screensavers
– TFT colour display with symbol display
– time and date display
– menu guidance in DE/EN/FR/NL/IT/ES/PT/PL/DK/SV/FI/NO/TR
– with integrated bus coupling unit
– bus connection via connecting terminal
– with spreader claws

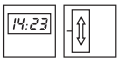
| **Suitable for** | **Order no.** | **Page** |
|---|---|---|
| Cover for KNX thermostats and room controllers | 8096 01 .. | 34 |
| Power supply 1x30V, 320 mA + 1x24V, 640 mA RMD | TXA114 | 139 |
| Electrical power supply 24 V DC RMD | TGA200 | 140 |
| **Optional** | | |
| Temperature sensor | EK090 | 40 |
| Outdoor temperature sensor | EK088 | 39 |

| Design | Order no. | PU |
|---|---|---|
| KNX thermostat | **8044 01 00** | 1 |



### KNX room controller

– display
– integrated bus coupling unit




| | |
|---|---|
| Operating voltage over bus | 21 ... 32 V= |
| Auxiliary voltage | 24 V= |
| Energy efficiency class | IV (2%) |
| TFT screen size | 1.93" |
| Operating temperature | - 5 ... + 45 °C |
| Dimensions of display (W x H) | 38.3 x 30.3 mm |
| Insertion depth | 32 mm |

– for individual single room temperature control
– control parameter for heating/cooling unit pre-set
– operating mode heating, cooling or heating/cooling can be selected
– comfort, standby, night-time reduction, frost/heat protection operating mode switchable via scene
– switching PI-control (PWM) or switching 2-point control can be selected
– heating type warm water heating, warm water underfloor heating, electric heating, electric underfloor heating or split unit can be selected
– cooling type cooling ceiling, convector fan or split unit can be selected
– push-button functions: switching, dimming, roller shutter/blind, value transmitter 2 byte, thermostat, scene, priority
– switching of up to 64 scenes possible
– with keylock
– with holiday switching
– with frost protection function
– function for manual interruption of automatic functions already triggered
– additional connection for external temperature sensor
– temperature measurement via internal, external temperature sensor or via object and their mean value formation
– temperature adjustable for comfort, standby and night-time reduction
– operation via sensitivouch control surface
– to display and initiate actions
– display of operating mode, controller lockout, room/outside temperature, time
– screensavers
– TFT colour display with symbol display
– time and date display
– menu guidance in DE/EN/FR/NL/IT/ES/PT/PL/DK/SV/FI/NO/TR
– with integrated bus coupling unit
– bus connection via connecting terminal
– with spreader claws

| Suitable for | Order no. | Page |
|---|---|---|
| Cover for KNX thermostats and room controllers | 8096 01 .. | 34 |
| Power supply 1x30V, 320 mA + 1x24V, 640 mA RMD | TXA114 | 139 |
| Electrical power supply 24 V DC RMD | TGA200 | 140 |
| **Optional** | | |
| Temperature sensor | EK090 | 40 |
| Outdoor temperature sensor | EK088 | 39 |

| Design | Order no. | PU |
|---|---|---|
| KNX room controller | **8066 01 00** | 1 |



### Cover for KNX thermostats and room controllers



| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **8096 01 82** | 1 |
| polar white glossy | **8096 01 89** | 1 |
| polar white, matt, plastic | **8096 01 80** | 1 |
| anthracite, matt | **8096 01 85** | 1 |
| aluminium matt, lacquered | **8096 01 83** | 1 |
| **Berker Q.1/Q.3** | | |
| white velvety | **8096 01 22** | 1 |
| polar white velvety | **8096 01 29** | 1 |
| anthracite velvety, lacquered | **8096 01 26** | 1 |
| aluminium velvety, lacquered | **8096 01 21** | 1 |



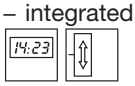
| Design | Order no. | PU |
|---|---|---|
| **Berker K.1/K.5** | | |
| polar white glossy | **8096 01 79** | 1 |
| anthracite, matt | **8096 01 75** | 1 |
| aluminium, matt, lacquered | **8096 01 71** | 1 |
| stainless steel matt, lacquered | **8096 01 73** | 1 |

## KNX Touch Control



**KNX Touch Control**

– display
– integrated bus coupling unit



| | |
|---|---|
| Operating voltage via bus | 21/32 V DC |
| Auxiliary voltage | 12/40 V DC |
| TFT screen size | 3.5" |
| Display resolution | 320 x 240 px |
| Power consumption, KNX | ˜ 1 mW |
| Operating temperature | 0/50 °C |
| Assembly height | 25,5 mm |
| Dimensions (W x H x D) | 95/75/44 mm |

- up to 10 pages for operating elements and display selection from 37 predefined layouts
- capacitive 3.5" touch display, resolution of 320 x 240 pixels
- integrated proximity sensor for quick activation of the display from standby mode and for triggering functions via a corresponding communication object
- integrated brightness sensor for automatic adjustment of the display lighting
- integrated scene control (16 scenes), timer, alarm clock
- 5 automatic channels for regulation and control (e.g. room temperature control via the KNX temperature sensor of the new push-button sensors)
- 4 AND as well as 4 OR logic gates with 4 inputs each (communication objects)
- 4 inputs for binary contact or temperature sensor
- microSD card slot e.g. as memory for image data for screen saver
- icons for display can be replaced (icon library, microSD card)

| **Suitable for** | **Order no.** | **Page** |
|---|---|---|
| Cover for KNX thermostats and room controllers | 8096 01 .. | 34 |
| Power supply 1x30V, 320 mA + 1x24V, 640 mA RMD | TXA114 | 139 |
| Electrical power supply 24 V DC RMD | TGA200 | 140 |
| **Optional** | | |
| Temperature sensor | EK090 | 40 |
| Outdoor temperature sensor | EK088 | 39 |

| Design | Order no. | PU |
|---|---|---|
| KNX Touch Control | **7574 01 01** | 1 |



| | | |
|---|---|---|
| **Angular design frame** | | |
| polar white matt | **1319 19 09** | 1 |
| stainless steel matt finish | **1319 22 04** | 1 |
| black, glossy | **1319 22 45** | 1 |
| aluminium, anodised | **1319 22 84** | 1 |
| stainless steel brushed | **1319 36 06** | 1 |
| white matt | **1319 60 99** | 1 |
| glass, aluminium | **1319 64 14** | 1 |
| aluminium matt, lacquered | **1319 64 24** | 1 |
| glass, black | **1319 66 16** | 1 |
| glass, polar white | **1319 69 09** | 1 |
| anthracite, matt | **1319 70 06** | 1 |
| polar white, glossy | **1319 70 09** | 1 |
| white, glossy | **1319 89 82** | 1 |



| | | |
|---|---|---|
| **Round design frame** | | |
| stainless steel matt finish | **1319 21 04** | 1 |
| glass, polar white | **1319 21 09** | 1 |
| glass, black | **1319 21 16** | 1 |
| black, glossy | **1319 21 45** | 1 |
| aluminium, anodised | **1319 21 84** | 1 |
| polar white, glossy | **1319 21 89** | 1 |
| white matt | **1319 60 82** | 1 |
| aluminium matt, lacquered | **1319 60 84** | 1 |
| anthracite matt | **1319 60 86** | 1 |
| polar white matt | **1319 60 89** | 1 |

## KNX EnOcean



### EnOcean wireless wall-transmitter module

| | |
|---|---|
| Number of wireless channels | 2 |
| Wireless transmission frequency | 868.3 MHz |
| Wireless transmission range (free field) | max. 300 m |
| Wireless transmission range (building) | max. 30 m |
| Operating temperature | -25 to +65°C |
| Relative humidity | 0 ... 95% |

- single-surface operation in conjunction with suitable wireless receivers
- for the transmission of switching, dimming or blind commands to the wireless receiver of the EnOcean system
- each channel can be assigned to any number of wireless receivers
- provision of transmission energy through conversion of the mechanical energy on button actuation
- batteryless, maintenance-free device without external power supply
- with fitting material
- mounting with frames on even surface, e.g. also for extension of combinations
- for screw or adhesive fixing

| Suitable for | Order no. | Page |
|---|---|---|
| **Optional** | | |
| KNX EnOcean gateway AP | TYC120 | 37 |

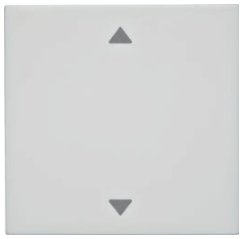
| Design | Order no. | PU |
|---|---|---|
| En Ocean wireless | **2411 12 00** | 1 |



### Rocker for EnOcean wireless wall-transmitter module

| Suitable for | Order no. | Page |
|---|---|---|
| EnOcean wireless wall-transmitter module | 2411 12 00 | 36 |

| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **2411 11 89** | 10 |
| polar white glossy | **2411 11 09** | 10 |
| anthracite, matt | **2411 11 06** | 10 |



### Rocker with imprinted arrows symbol for EnOcean wireless wall-transmitter module

| Suitable for | Order no. | Page |
|---|---|---|
| EnOcean wireless wall-transmitter module | 2411 12 00 | 36 |

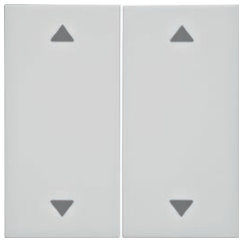
| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **2411 12 89** | 10 |
| polar white glossy | **2411 12 09** | 10 |
| anthracite, matt | **2411 12 06** | 10 |



### Rocker 2gang for EnOcean wireless walltransmitter module

| Suitable for | Order no. | Page |
|---|---|---|
| EnOcean wireless wall-transmitter module | 2411 12 00 | 36 |

| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **2412 11 89** | 10 |
| polar white glossy | **2412 11 09** | 10 |
| anthracite, matt | **2412 11 06** | 10 |



### Rocker 2gang with imprinted arrows symbol for EnOcean wireless wall-transmitter module

| Suitable for | Order no. | Page |
|---|---|---|
| EnOcean wireless wall-transmitter module | 2411 12 00 | 36 |

| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **2412 12 89** | 10 |
| polar white glossy | **2412 12 09** | 10 |
| anthracite, matt | **2412 12 06** | 10 |



**Rocker 2gang on one side with imprinted arrows symbol for EnOcean wireless walltransmitter module gang with imprinted arrows symbol**

| Suitable for | Order no. | Page |
|---|---|---|
| EnOcean wireless wall-transmitter module | 2411 12 00 | 36 |

| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **2412 13 89** | 10 |
| polar white glossy | **2412 13 09** | 10 |
| anthracite, matt | **2412 13 06** | 10 |



**KNX EnOcean Gateway surface-mounted**

| | |
|---|---|
| Operating voltage over bus | 21 ... 32V= |
| Current consumption | ca. 12mA |
| Wireless transmission/reception frequency | 868.3MHz (ASK) |
| Number of function channels | 32 |
| Operating temperature | -5 ... +45°C |
| Relative humidity | 5 ... 93% |
| Dimensions | 81 x 81 x 25mm |

Bi-directional gateway for transmission of EnOcean wireless signals to the KNX bus or of KNX telegrams into the EnOcean system.

- each channel can be configured with different functions
- EnOcean receiver functions for conversion into KNX telegrams: including switching, dimming, blind, light scene, window contacts, temperature values, brightness values, presence simulation, room control devices
- EnOcean transmission functions for the conversion of KNX telegrams: switching, dimming, blind, valve drives
- logic and control functions
- teaching-in of the wireless components using the buttons and display
- LC display for commissioning and system diagnostics
- with programming button and red programming LED
- with integrated repeater for EnOcean transmission commands
- bus connection via connecting terminal
- installation possible on flush-mounted box

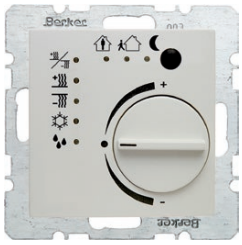
| Suitable for | Order no. | Page |
|---|---|---|
| EnOcean wireless wall-transmitter module | 2411 12 00 | 36 |

| Design | Order no. | PU |
|---|---|---|
| white | **TYC120** | 10 |

## Sensors

### Thermostat

- For individual single room temperature control
- For heating and/or cooling mode
- Heating or cooling possible in 2 stages
- Bus connection via connecting terminal
- For continuous (PI) or switched (2-point) control
- With dismantling protection
- 4 binary inputs or 2-3 binary inputs and 1-2 outputs parameterisable
- With 4 independent binary inputs for potential-free contacts e.g. window magnetic contact
- Behaviour can be defined for bus voltage return
- Binary inputs / outputs with screw terminals
- Valve protection can be defined



**KNX thermostat**

- setting knob
- integrated bus coupling unit

| | |
|---|---|
| Output current per channel | max. 0.8 mA |
| Set value control by setting knob | ± 0 ... 5 K |
| Operating temperature | -5 ... +45 °C |
| Cable length, inputs/outputs | max. 5 m |
| Sensor cable length | 50 m |

Binary input 4 parameter defineable for temperature sensor, order no. 161.

- operating modes:comfort, standby, night lowering, frost/heat protection, dewpoint displayed with LED
- with presence button for switching between comfort and standby mode
- with programming button and red programming LED
- presence button and setting knob can be programmed to have no functions
- with status LEDs: red for heating, blue for cooling and yellow for activation
- without spreader claws

| Suitable for optional | Order no. | Page |
|---|---|---|
| Temperature sensor | 161 | 39 |

| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **7544 11 52** | 1 |
| polar white glossy | **7544 11 59** | 1 |
| polar white matt | **7544 11 89** | 1 |
| anthracite matt | **7544 11 85** | 1 |
| aluminium matt, lacquered | **7544 11 83** | 1 |



| | | |
|---|---|---|
| **Berker Q.1/Q.3** | | |
| white velvety | **7544 11 22** | 1 |
| polar white velvety | **7544 11 29** | 1 |
| anthracite velvety, lacquered | **7544 11 26** | 1 |
| aluminium | **7544 11 24** | 1 |



| | | |
|---|---|---|
| **Berker K.1/K.5** | | |
| polar white glossy | **7544 11 79** | 1 |
| anthracite matt, lacquered | **7544 11 75** | 1 |
| aluminium matt, lacquered | **7544 11 71** | 1 |
| stainless steel matt, lacquered | **7544 11 73** | 1 |




**KNX room thermostat**

- integrated bus coupling unit

| | |
|---|---|
| Power supply | bus KNX/EIB 30V DC TBTS |
| Power consumption | < 10 mA |
| Operating temperature | 0 °C ... +45 °C |
| Protection type | IP21 |

Binary input 3 parameter defineable for temperature sensor, order EK087.

- operating modes: comfort, standby, night lowering, frost/heat protected, dewpoint
- with programming button and programming LED
- red/blue LED (red for heating and blue for cooling)
- one input allows a floor temperature probe to be connected.

| Suitable for optional | Order no. | Page |
|---|---|---|
| Temperature sensor | EK0.. | 39 |

| Design | Order no. | PU |
|---|---|---|
| white | **TX320** | 1 |



### KNX object thermostat

- integrated bus coupling unit

| | |
|---|---|
| Output current per channel | max. 0.8 mA |
| Operating temperature | -5 ... +45 °C |
| Cable length, inputs/outputs | max. 5 m |
| Sensor cable length | 50 m |

Binary input 4 parameter defineable for temperature sensor, order no. 161.

– operating modes: comfort, standby, night lowering, frost/heat protected, dewpoint
– with programming button and red programming LED
– without spreader claws

| Suitable for optional | Order no. | Page |
|---|---|---|
| Temperature sensor | 161 | 39 |

| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **7544 12 52** | 1 |
| polar white glossy | **7544 12 59** | 1 |
| polar white matt | **7544 12 89** | 1 |
| anthracite matt | **7544 12 85** | 1 |
| aluminium matt, lacquered | **7544 12 83** | 1 |



| | | |
|---|---|---|
| **Berker Q.1/Q.3** | | |
| white velvety | **7544 12 22** | 2 |
| polar white velvety | **7544 12 29** | 1 |
| anthracite velvety, lacquered | **7544 12 26** | 1 |
| aluminium | **7544 12 24** | 1 |



| | | |
|---|---|---|
| **Berker K.1/K.5** | | |
| polar white glossy | **7544 12 79** | 1 |
| anthracite matt, lacquered | **7544 12 75** | 1 |
| aluminium, aluminium anodised | **7544 12 71** | 1 |
| stainless steel, metal matt finish | **7544 12 73** | 1 |



### Temperature sensor

| | |
|---|---|
| Characteristic resistance value at 25 °C | 33 kΩ |
| Sensor cable length | 4 m |

– as replacement or function extension of products with suitable connection, such as thermostat, glass sensors or KNX thermostat

| Suitable for | Order no. | Page |
|---|---|---|
| Glass sensors comfort | | 89 |
| Glass sensors with thermostat | | 91 |
| KNX thermostat | | 38 |
| KNX object thermostat | | 39 |

| Design | Order no. | PU |
|---|---|---|
| temperature sensor | **161** | 1 |



### Temperature sensor

| | |
|---|---|
| Characteristic resistance value at 25 °C | 100 kΩ |
| Max. distance between probe and thermostat | 10 m |
| Sensor cable length | 4 m |

| Suitable for | Order no. | Page |
|---|---|---|
| KNX room thermostat | TX320 | 38 |

| Design | Order no. | PU |
|---|---|---|
| temperature sensor | **EK087** | 1 |



### Temperature sensors

| Design | Order no. | PU |
|---|---|---|
| outdoor sensor | **EK088** | 1 |
| indoor sensor | **EK089** | 1 |



### Temperature sensor

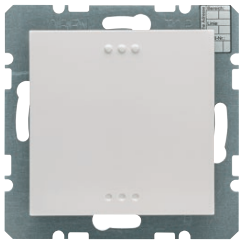
| | |
|---|---|
| Characteristic resistance value at 25 °C | 10 kΩ |
| Operating temperature | - 40 ... + 80 °C |
| Sensor cable length | 4 m |

– as replacement or function extension of products with suitable connection, such as thermostat, glass sensors or KNX thermostat

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button module 1gang | 8014 11 .. | 28 |
| Push-button module 2gang | 8014 21 .. | 29 |
| KNX thermostat | 8044 01 00 | 33 |
| KNX room controller | 8066 01 00 | 34 |
| Bus application unit flush-mounted | 8004 00 .. | 18 |

| Design | Order no. | PU |
|---|---|---|
| Temperature sensor | **EK090** | 1 |

## CO2 Sensors



### CO2 Sensors

- integrated bus coupling unit

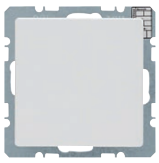
| | |
|---|---|
| Rated voltage KNX | DC 21 ... 32 V SELV |
| Current consumption KNX | typical 12.5 mA |
| Operating temperature | -5 ... +45 °C |
| CO2 sensor measuring range | 0 ... 2000 ppm |
| Humidity sensors measuring range | 10 ... 95 % |
| Temperature sensors measuring range | -5 ... +45 °C |

Output of the measured values as telegram to the bus, e.g. for controlling fans or window drives via KNX telegrams.
Recommendation: Use deep accessory sockets.
The optimum installation height is approx. 1.5 m.

- measurement of CO2 concentration, relative air humidity and air temperature
- operating modes Comfort, Standby, Night operation, Frost/heat protection
- dew point alarm for, for example, cooling blankets and conservatories, to avoid possible mould formation
- max of 4 different adjustable CO2 threshold values
- measurement of room temperature and comparison with setpoint temperature
- max of 2 adjustable humidity threshold values
- programming button and LEDs
- functions: dimming, shutter control, light scene extension unit, brightness or temperature value transmitter.
- inputs lockable in operation

| Suitable for | Order no. | Page |
|---|---|---|
| Temperature sensor | 161 | 39 |

| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **7544 13 52** | 1 |
| polar white glossy | **7544 13 59** | 1 |
| polar white matt | **7544 13 89** | 1 |
| anthracite matt | **7544 13 85** | 1 |
| aluminium matt, lacquered | **7544 13 83** | 1 |



| | | |
|---|---|---|
| **Berker Q.1/Q.3** | | |
| white velvety | **7544 13 22** | 1 |
| polar white velvety | **7544 13 29** | 1 |
| anthracite velvety, lacquered | **7544 13 26** | 1 |
| aluminium | **7544 13 24** | |



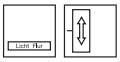
| | | |
|---|---|---|
| **Berker K.1/K.5** | | |
| polar white glossy | **7544 13 79** | 1 |
| anthracite matt, lacquered | **7544 13 75** | 1 |
| aluminium, aluminium anodised | **7544 13 71** | 1 |
| stainless steel, metal matt finish | **7544 13 73** | 1 |

## systo KNX



**systo KNX**

– labeling field
– integrated bus coupling unit



| | |
|---|---|
| Rated voltage KNX | DC 21...32V SELV |
| Current consumption KNX | type 20mA |
| Degree of protection | IP20 |
| Operating temperature | 5/45 °C |
| Storage temperature | 20/70 °C |
| Dimensions (W x H x D) | 45/45/17 mm |

- available in 3 colours: white, alu or black
- 2, 4 or 6 push-buttons versions
- push-button functions: switching/dimming, blind control, value transmitter, scene call-up, specification of the heating operating mode, forced control, sleeping switch and comparator function
- integrated bus coupling unit
- labeling field
- versions with LED and backlight available
- versions with IR receiver also available

| Design | Order no. | PU |
|---|---|---|
| **2 push-buttons** | | |
| white | **WST302** | 1 |
| black | **WST302N** | 1 |
| alu | **WST302T** | 1 |



| | | |
|---|---|---|
| **4 push-buttons** | | |
| white | **WST304** | 1 |
| black | **WST304N** | 1 |
| alu | **WST304T** | 1 |



| | | |
|---|---|---|
| **6 push-buttons** | | |
| white | **WST306** | 1 |
| black | **WST306N** | 1 |
| alu | **WST306T** | 1 |



| | | |
|---|---|---|
| **2 push-buttons with LED** | | |
| white | **WST312** | 1 |
| black | **WST312N** | 1 |
| alu | **WST312T** | 1 |



| | | |
|---|---|---|
| **4 push-buttons with LED** | | |
| white | **WST314** | 1 |
| black | **WST314N** | 1 |
| alu | **WST314T** | 1 |



| | | |
|---|---|---|
| **6 push-buttons with LED** | | |
| white | **WST316** | 1 |
| black | **WST316N** | 1 |
| alu | **WST316T** | 1 |



| | | |
|---|---|---|
| **2 push-buttons with LED and IR receiver** | | |
| white | **WST322** | 1 |
| black | **WST322N** | 1 |
| alu | **WST322T** | 1 |



| | | |
|---|---|---|
| **4 push-buttons with LED and IR receiver** | | |
| white | **WST324** | 1 |
| black | **WST324N** | 1 |
| alu | **WST324T** | 1 |

**systo PIR sensor KNX bus 2 channels**

| | |
|---|---|
| Detection angle | 180° |
| Response brightness | 5 ... 1000 lux |
| Delay time | 10 s to 30 min |
| Current consumption KNX | 10 mA |

| Design | Order no. | PU |
|---|---|---|
| white | **WST502** | 1 |
| black | **WST502N** | 1 |
| alu | **WST502T** | 1 |

## Berker S.1 frames



### White frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| glossy, 1gang | **1011 89 82** | 10 |
| glossy, 2gang | **1012 89 82** | 10 |
| glossy, 3gang | **1013 89 82** | 10 |
| glossy, 4gang | **1014 89 82** | 2 |
| glossy, 5gang | **1015 89 82** | 2 |



### Polar white frames

– for vertical and horizontal mounting

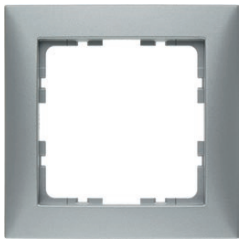
| Design | Order no. | PU |
|---|---|---|
| glossy, 1gang | **1011 89 89** | 10 |
| glossy, 2gang | **1012 89 89** | 10 |
| glossy, 3gang | **1013 89 89** | 10 |
| glossy, 4gang | **1014 89 89** | 2 |
| glossy, 5gang | **1015 89 89** | 2 |
| matt, 1gang | **1011 99 09** | 10 |
| matt, 2gang | **1012 99 09** | 10 |
| matt, 3gang | **1013 99 09** | 10 |
| matt, 4gang | **1014 99 09** | 10 |
| matt, 5gang | **1015 99 09** | 2 |



### Anthracite frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| matt, 1gang | **1011 99 49** | 10 |
| matt, 2gang | **1012 99 49** | 10 |
| matt, 3gang | **1013 99 49** | 10 |
| matt, 4gang | **1014 99 49** | 2 |
| matt, 5gang | **1015 99 49** | 2 |



### Aluminium frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| matt, 1gang | **1011 99 39** | 10 |
| matt, 2gang | **1012 99 39** | 10 |
| matt, 3gang | **1013 99 39** | 10 |
| matt, 4gang | **1014 99 39** | 2 |
| matt, 5gang | **1015 99 39** | 2 |



## Red frames

– for emphasising special switches, socket outlets, etc.
– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| glossy, 1gang | **1011 89 62** | 10 |
| glossy, 2gang | **1012 89 62** | 2 |
| glossy, 3gang | **1013 89 62** | 2 |
| glossy, 4gang | **1014 89 62** | 2 |
| glossy, 5gang | **1015 89 62** | 2 |



## White frames

- Labelling field



Labelling field height arranged for P-touch strips 6 mm.

| Design | Order no. | PU |
|---|---|---|
| glossy, 1gang | **1011 89 12** | 10 |
| glossy, 2gang vertical | **1012 89 12** | 10 |
| glossy, 3gang vertical | **1013 89 12** | 10 |
| glossy, 2gang horizontal | **1022 89 12** | 10 |
| glossy, 3gang horizontal | **1023 89 12** | 10 |



## Polar white frames

- Labelling field



Labelling field height arranged for P-touch strips 6 mm.

| Design | Order no. | PU |
|---|---|---|
| glossy, 1gang | **1011 89 19** | 10 |
| glossy, 2gang vertical | **1012 89 19** | 10 |
| glossy, 3gang vertical | **1013 89 19** | 10 |
| glossy, 2gang horizontal | **1022 89 19** | 10 |
| glossy, 3gang horizontal | **1023 89 19** | 10 |
| matt, 1gang | **1011 99 19** | 10 |
| matt, 2gang vertical | **1012 99 19** | 10 |
| matt, 3gang vertical | **1013 99 19** | 10 |
| matt, 2gang horizontal | **1022 99 19** | 10 |
| matt, 3gang horizontal | **1023 99 19** | 10 |



## Anthracite frames

- Labelling field



Labelling field height arranged for P-touch strips 6 mm.

| Design | Order no. | PU |
|---|---|---|
| matt, 1gang | **1011 99 69** | 10 |
| matt, 2gang vertical | **1012 99 69** | 10 |
| matt, 3gang vertical | **1013 99 69** | 10 |
| matt, 2gang horizontal | **1022 99 69** | 10 |
| matt, 3gang horizontal | **1023 99 69** | 10 |



### Aluminium frames

- Labelling field

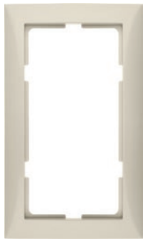


Labelling field height arranged for P-touch strips 6 mm.

| Design | Order no. | PU |
|---|---|---|
| matt, 1gang | **1011 99 59** | 10 |
| matt, 2gang vertical | **1012 99 59** | 10 |
| matt, 3gang vertical | **1013 99 59** | 10 |
| matt, 2gang horizontal | **1022 99 59** | 10 |
| matt, 3gang horizontal | **1023 99 59** | 10 |

## Frames with large cut-out

– For vertical mounting
– Not suitable for surface-mounted housing.



### White frame with large cut-out

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 80 | 25 |
| Push-button 5gang with thermostat | 7566 57 80 | 25 |

| Design | Order no. | PU |
|---|---|---|
| glossy | **1309 89 82** | 10 |



### Polar white frames with large cut-out

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 80 | 25 |
| Push-button 5gang with thermostat | 7566 57 80 | 25 |

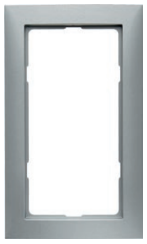
| Design | Order no. | PU |
|---|---|---|
| glossy | **1309 89 89** | 10 |
| matt | **1309 99 09** | 10 |



### Anthracite frame with large cut-out

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 85 | 25 |
| Push-button 5gang with thermostat | 7566 57 85 | 25 |

| Design | Order no. | PU |
|---|---|---|
| matt | **1309 99 49** | 10 |



### Aluminium frame with large cut-out

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 85 | 25 |
| Push-button 5gang with thermostat | 7566 57 85 | 25 |

| Design | Order no. | PU |
|---|---|---|
| matt | **1309 99 39** | 10 |

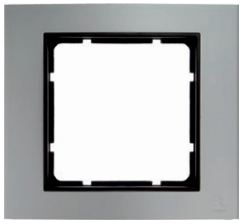
## Berker B.3 frames

– For vertical and horizontal mounting
– Metal, aluminum profile



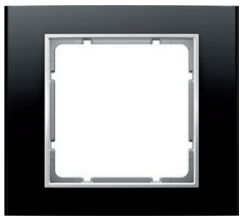
### Aluminium/polar white matt, aluminium anodised frames

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 39 04** | 10 |
| 2gang | **1012 39 04** | 10 |
| 3gang | **1013 39 04** | 10 |
| 4gang | **1014 39 04** | 2 |
| 5gang | **1015 39 04** | 2 |



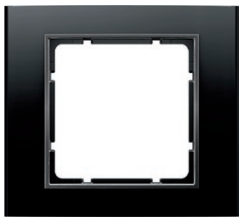
### Aluminium/anthracite matt, aluminium anodised frames

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 30 04** | 10 |
| 2gang | **1012 30 04** | 10 |
| 3gang | **1013 30 04** | 10 |
| 4gang | **1014 30 04** | 2 |
| 5gang | **1015 30 04** | 2 |



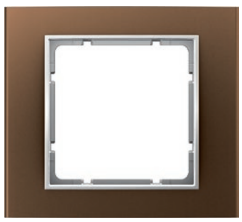
### Aluminium black/polar white matt, aluminium anodised frames

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 30 25** | 10 |
| 2gang | **1012 30 25** | 10 |
| 3gang | **1013 30 25** | 10 |
| 4gang | **1014 30 25** | 2 |
| 5gang | **1015 30 25** | 2 |



### Aluminium black/anthracite matt, aluminium anodised frames

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 30 05** | 10 |
| 2gang | **1012 30 05** | 10 |
| 3gang | **1013 30 05** | 10 |
| 4gang | **1014 30 05** | 2 |
| 5gang | **1015 30 05** | 2 |



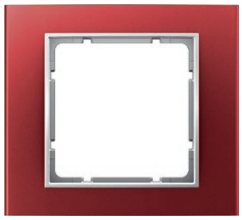
### Aluminium brown/polar white matt, aluminium anodised, frames

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 30 21** | 10 |
| 2gang | **1012 30 21** | 10 |
| 3gang | **1013 30 21** | 10 |
| 4gang | **1014 30 21** | 2 |
| 5gang | **1015 30 21** | 2 |



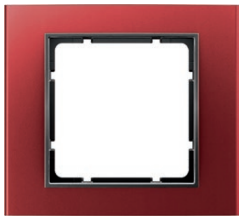
### Aluminium brown/anthracite matt, aluminium anodised frames

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 30 01** | 10 |
| 2gang | **1012 30 01** | 10 |
| 3gang | **1013 30 01** | 10 |
| 4gang | **1014 30 01** | 2 |
| 5gang | **1015 30 01** | 2 |



### Aluminium red/polar white matt, aluminium anodised frames

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 30 22** | 10 |
| 2gang | **1012 30 22** | 10 |
| 3gang | **1013 30 22** | 10 |
| 4gang | **1014 30 22** | 2 |
| 5gang | **1015 30 22** | 2 |



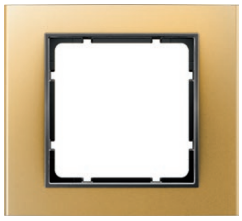
### Aluminium red/anthracite matt, aluminium anodised frames

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 30 12** | 10 |
| 2gang | **1012 30 12** | 10 |
| 3gang | **1013 30 12** | 10 |
| 4gang | **1014 30 12** | 2 |
| 5gang | **1015 30 12** | 2 |



### Aluminium gold/polar white matt, aluminium anodised frames

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 30 46** | 10 |
| 2gang | **1012 30 46** | 10 |
| 3gang | **1013 30 46** | 10 |
| 4gang | **1014 30 46** | 2 |
| 5gang | **1015 30 46** | 2 |



### Aluminium gold/anthracite matt, aluminium anodised frames

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 30 16** | 10 |
| 2gang | **1012 30 16** | 10 |
| 3gang | **1013 30 16** | 10 |
| 4gang | **1014 30 16** | 2 |
| 5gang | **1015 30 16** | 2 |

## Frames with large cut-out

– For vertical mounting
– Metal, aluminum profile
– Not suitable for surface-mounted housing.



### Aluminium/polar white matt, aluminium anodised frame

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 80 | 25 |
| Push-button 5gang with thermostat | 7566 57 80 | 25 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 39 04** | 1 |



### Aluminium/anthracite matt, aluminium anodised frame

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 80 | 25 |
| Push-button 5gang with thermostat | 7566 57 80 | 25 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 30 04** | 1 |



### Aluminium black/polar white matt, aluminium anodised frame

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 80 | 25 |
| Push-button 5gang with thermostat | 7566 57 80 | 25 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 30 25** | 1 |



### Aluminium black/anthracite matt, aluminium anodised frame

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 85 | 25 |
| Push-button 5gang with thermostat | 7566 57 85 | 25 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 30 05** | 1 |



### Aluminium brown/polar white matt, aluminium anodised frame

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 80 | 25 |
| Push-button 5gang with thermostat | 7566 57 80 | 25 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 30 21** | 1 |



### Aluminium brown/anthracite matt, aluminium anodised frame

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 85 | 25 |
| Push-button 5gang with thermostat | 7566 57 85 | 25 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 30 01** | 1 |



### Aluminium red/polar white matt, aluminium anodised frame

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 80 | 25 |
| Push-button 5gang with thermostat | 7566 57 80 | 25 |

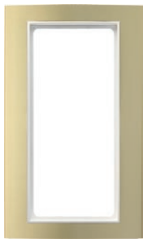
| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 30 22** | 1 |



### Aluminium red/anthracite matt, aluminium anodised frame

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 85 | 25 |
| Push-button 5gang with thermostat | 7566 57 85 | 25 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 30 12** | 1 |



### Aluminium gold/polar white matt, aluminium anodised frame

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 80 | 25 |
| Push-button 5gang with thermostat | 7566 57 80 | 25 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 30 46** | 1 |



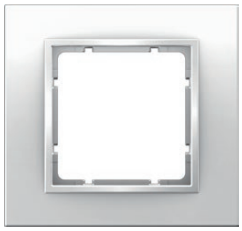
### Aluminium gold/anthracite matt, aluminium anodised frame

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 85 | 25 |
| Push-button 5gang with thermostat | 7566 57 85 | 25 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 30 16** | 1 |

## Berker B.7 frames

– Not suitable for surface-mounted housing
– For vertical and horizontal mounting



### Polar white frames

– plastic

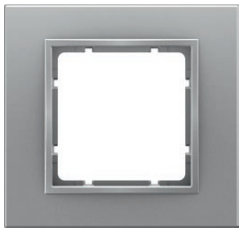
| Design | Order no. | PU |
|---|---|---|
| matt, 1gang | **1011 69 19** | 10 |
| matt, 2gang | **1012 69 19** | 5 |
| matt, 3gang | **1013 69 19** | 5 |
| matt, 4gang | **1014 69 19** | 1 |
| matt, 5gang | **1015 69 19** | 1 |



### Anthracite frames

– plastic

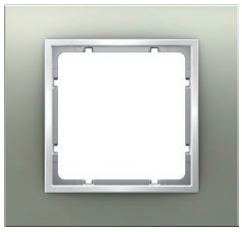
| Design | Order no. | PU |
|---|---|---|
| matt, 1gang | **1011 66 26** | 10 |
| matt, 2gang | **1012 66 26** | 5 |
| matt, 3gang | **1013 66 26** | 5 |
| matt, 4gang | **1014 66 26** | 1 |
| matt, 5gang | **1015 66 26** | 1 |



### Aluminium frames

– plastic

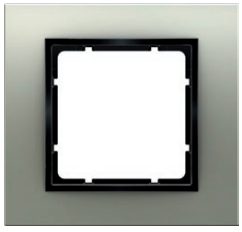
| Design | Order no. | PU |
|---|---|---|
| matt, lacquered, 1gang | **1011 64 24** | 10 |
| matt, lacquered, 2gang | **1012 64 24** | 5 |
| matt, lacquered, 3gang | **1013 64 24** | 5 |
| matt, lacquered, 4gang | **1014 64 24** | 1 |
| matt, lacquered, 5gang | **1015 64 24** | 1 |



### Aluminium/polar white matt, aluminium anodised frames

– metal, aluminum profile anodized

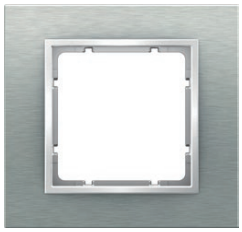
| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 69 14** | 10 |
| 2gang | **1012 69 14** | 5 |
| 3gang | **1013 69 14** | 5 |
| 4gang | **1014 69 14** | 1 |
| 5gang | **1015 69 14** | 1 |



### Aluminium/anthracite matt, aluminium anodised frames

– metal, aluminum profile anodized

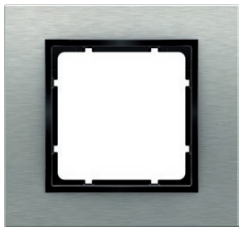
| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 69 04** | 10 |
| 2gang | **1012 69 04** | 5 |
| 3gang | **1013 69 04** | 5 |
| 4gang | **1014 69 04** | 1 |
| 5gang | **1015 69 04** | 1 |



### Stainless steel/polar white matt, metal brushed frames

– metal, stainless steel, brushed

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 36 09** | 10 |
| 2gang vertical | **1012 36 09** | 5 |
| 3gang vertical | **1013 36 09** | 5 |
| 4gang vertical | **1014 36 09** | 1 |
| 5gang vertical | **1015 36 09** | 1 |
| 2gang horizontal | **1022 36 09** | 5 |
| 3gang horizontal | **1023 36 09** | 5 |
| 4gang horizontal | **1024 36 09** | 1 |
| 5gang horizontal | **1025 36 09** | 1 |



### Stainless steel/anthracite matt, metal brushed frames

– metal, stainless steel, brushed

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 36 06** | 10 |
| 2gang vertical | **1012 36 06** | 5 |
| 3gang vertical | **1013 36 06** | 5 |
| 4gang vertical | **1014 36 06** | 1 |
| 5gang vertical | **1015 36 06** | 1 |
| 2gang horizontal | **1022 36 06** | 5 |
| 3gang horizontal | **1023 36 06** | 5 |
| 4gang horizontal | **1024 36 06** | 1 |
| 5gang horizontal | **1025 36 06** | 1 |



### Glass polar white/polar white matt frames

– toughened glass

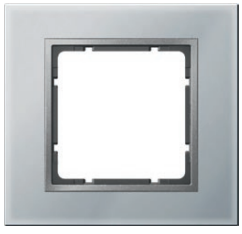
| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 69 09** | 10 |
| 2gang | **1012 69 09** | 5 |
| 3gang | **1013 69 09** | 5 |
| 4gang | **1014 69 09** | 1 |
| 5gang | **1015 69 09** | 1 |



### Glass black/anthracite matt frames

– toughened glass

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 66 16** | 10 |
| 2gang | **1012 66 16** | 5 |
| 3gang | **1013 66 16** | 5 |
| 4gang | **1014 66 16** | 1 |
| 5gang | **1015 66 16** | 1 |



### Glass aluminium/aluminium matt, lacquered frames

– toughened glass

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 64 14** | 10 |
| 2gang | **1012 64 14** | 5 |
| 3gang | **1013 64 14** | 5 |
| 4gang | **1014 64 14** | 1 |
| 5gang | **1015 64 14** | 1 |

## Frames with large cut-out

– For vertical mounting
– Not suitable for surface-mounted housing.



### Polar white matt, lacquered frame

– plastic

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 80 | 25 |
| Push-button 5gang with thermostat | 7566 57 80 | 25 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 69 19** | 2 |



### Anthracite matt, lacquered frame

– plastic

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 85 | 25 |
| Push-button 5gang with thermostat | 7566 57 85 | 25 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 66 26** | 2 |



### Aluminium matt, lacquered frame

– plastic

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 80 | 25 |
| Push-button 5gang with thermostat | 7566 57 80 | 25 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 64 24** | 2 |



### Aluminium/polar white matt, aluminium anodised frame

– metal, aluminum profile anodized

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 80 | 25 |
| Push-button 5gang with thermostat | 7566 57 80 | 25 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 69 14** | 2 |



### Aluminium/anthracite matt, aluminium anodised frame

– metal, aluminum profile anodized

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 85 | 25 |
| Push-button 5gang with thermostat | 7566 57 85 | 25 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 69 04** | 2 |



### Stainless steel/polar white matt, metal brushed frame

– stainless steel surface, brushed transversely

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 80 | 25 |
| Push-button 5gang with thermostat | 7566 57 80 | 25 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 36 09** | 2 |



### Stainless steel/anthracite matt, metal brushed frame

– stainless steel surface, brushed transversely

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 85 | 25 |
| Push-button 5gang with thermostat | 7566 57 85 | 25 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 36 06** | 2 |



### Glass polar white/polar white matt frame

– toughened glass

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 80 | 25 |
| Push-button 5gang with thermostat | 7566 57 80 | 25 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 69 09** | 2 |



### Glass black/anthracite matt frame

– toughened glass

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 85 | 25 |
| Push-button 5gang with thermostat | 7566 57 85 | 25 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 66 16** | 2 |



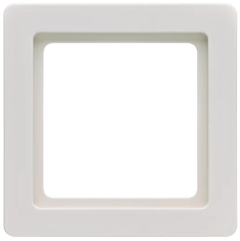
### Glass aluminium/aluminium matt, lacquered frame

– toughened glass

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 80 | 25 |
| Push-button 5gang with thermostat | 7566 57 80 | 25 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 64 14** | 2 |

## Berker Q.1 frames



### White velvety frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 60 82** | 10 |
| 2gang | **1012 60 82** | 10 |
| 3gang | **1013 60 82** | 2 |
| 4gang | **1014 60 82** | 2 |
| 5gang | **1015 60 82** | 2 |



### Polar white velvety frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 60 89** | 10 |
| 2gang | **1012 60 89** | 10 |
| 3gang | **1013 60 89** | 2 |
| 4gang | **1014 60 89** | 2 |
| 5gang | **1015 60 89** | 2 |



### Anthracite velvety, lacquered frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 60 86** | 10 |
| 2gang | **1012 60 86** | 10 |
| 3gang | **1013 60 86** | 2 |
| 4gang | **1014 60 86** | 2 |
| 5gang | **1015 60 86** | 2 |



### Aluminium frames

– for emphasising special switches, socket outlets, etc.
– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 60 84** | 10 |
| 2gang | **1012 60 84** | 10 |
| 3gang | **1013 60 84** | 2 |
| 4gang | **1014 60 84** | 2 |
| 5gang | **1015 60 84** | 2 |



### Red velvety frames

– for emphasising special switches, socket outlets, etc.
– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 60 62** | 10 |
| 2gang | **1012 60 62** | 10 |
| 3gang | **1013 60 62** | 2 |
| 4gang | **1014 60 62** | 2 |
| 5gang | **1015 60 62** | 2 |



### White velvety frames

- Labelling field



Labelling field height arranged for P-touch strips 6 mm.

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 60 12** | 10 |
| 2gang vertical | **1012 60 12** | 10 |
| 3gang vertical | **1013 60 12** | 10 |
| 4gang vertical | **1014 60 12** | 2 |
| 5gang vertical | **1015 60 12** | 2 |
| 2gang horizontal | **1022 60 12** | 10 |
| 3gang horizontal | **1023 60 12** | 10 |
| 4gang horizontal | **1024 60 12** | 2 |
| 5gang horizontal | **1025 60 12** | 2 |



### Polar white velvety frames

- Labelling field



Labelling field height arranged for P-touch strips 6 mm.

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 60 19** | 10 |
| 2gang vertical | **1012 60 19** | 10 |
| 3gang vertical | **1013 60 19** | 10 |
| 4gang vertical | **1014 60 19** | 2 |
| 5gang vertical | **1015 60 19** | 2 |
| 2gang horizontal | **1022 60 19** | 10 |
| 3gang horizontal | **1023 60 19** | 10 |
| 4gang horizontal | **1024 60 19** | 2 |
| 5gang horizontal | **1025 60 19** | 2 |



### Aluminium frames

- Labelling field



Labelling field height arranged for P-touch strips 6 mm.

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 60 14** | 10 |
| 2gang vertical | **1012 60 14** | 10 |
| 3gang vertical | **1013 60 14** | 10 |
| 4gang vertical | **1014 60 14** | 2 |
| 5gang vertical | **1015 60 14** | 2 |
| 2gang horizontal | **1022 60 14** | 10 |
| 3gang horizontal | **1023 60 14** | 10 |
| 4gang horizontal | **1024 60 14** | 2 |
| 5gang horizontal | **1025 60 14** | 2 |



**Anthracite velvety, lacquered frames**

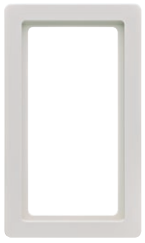
- Labelling field



Labelling field height arranged for P-touch strips 6 mm.

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 60 16** | 10 |
| 2gang vertical | **1012 60 16** | 10 |
| 3gang vertical | **1013 60 16** | 10 |
| 4gang vertical | **1014 60 16** | 2 |
| 5gang vertical | **1015 60 16** | 2 |
| 2gang horizontal | **1022 60 16** | 10 |
| 3gang horizontal | **1023 60 16** | 10 |
| 4gang horizontal | **1024 60 16** | 2 |
| 5gang horizontal | **1025 60 16** | 2 |

## Frames with large cut-out



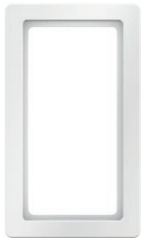
**White velvety frame**

Not suitable for surface-mounted frames.

– for vertical mounting

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 29 | 26 |
| Push-button 5gang with thermostat | 7566 57 29 | 27 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 60 82** | 10 |



**Polar white velvety frame**

Not suitable for surface-mounted frames.

– for vertical mounting

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 29 | 26 |
| Push-button 5gang with thermostat | 7566 57 29 | 27 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 60 89** | 10 |



**Anthracite velvety, lacquered frame**

Not suitable for surface-mounted frames.

– for vertical mounting

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 26 | 26 |
| Push-button 5gang with thermostat | 7566 57 26 | 27 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 60 86** | 10 |



**Aluminium, lacquered frame**

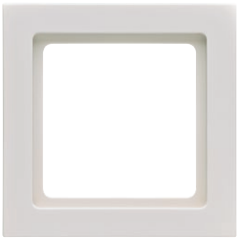
Not suitable for surface-mounted frames.

– for vertical mounting

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 26 | 26 |
| Push-button 5gang with thermostat | 7566 57 26 | 27 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 60 84** | 10 |

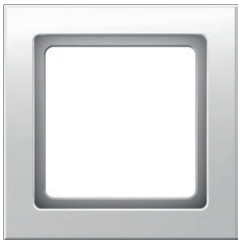
## Berker Q.3 frames



### White velvety frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 60 92** | 10 |
| 2gang | **1012 60 92** | 2 |
| 3gang | **1013 60 92** | 2 |
| 4gang | **1014 60 92** | 2 |
| 5gang | **1015 60 92** | 2 |



### Polar white velvety frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 60 99** | 10 |
| 2gang | **1012 60 99** | 2 |
| 3gang | **1013 60 99** | 2 |
| 4gang | **1014 60 99** | 2 |
| 5gang | **1015 60 99** | 2 |



### Anthracite velvety, lacquered frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 60 96** | 10 |
| 2gang | **1012 60 96** | 2 |
| 3gang | **1013 60 96** | 2 |
| 4gang | **1014 60 96** | 2 |
| 5gang | **1015 60 96** | 2 |



### Aluminium, lacquered frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 60 94** | 10 |
| 2gang | **1012 60 94** | 2 |
| 3gang | **1013 60 94** | 2 |
| 4gang | **1014 60 94** | 2 |
| 5gang | **1015 60 94** | 2 |



**White velvety frames**

- Labelling field

– also suitable for cable ducts

When the frame has been dismantled, the labelling field remains on the insert.

For inserts with order no. 4522, 4523, 4593, 4594, mounting of the labelling field on the supporting ring is not possible.
For this, the labelling field can be engaged in the recess of the frame.

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1051 60 92** | 10 |
| 2gang horizontal | **1022 60 92** | 10 |
| 2gang vertical | **1052 60 92** | 10 |
| 3gang horizontal | **1023 60 92** | 10 |
| 3gang vertical | **1053 60 92** | 10 |



**Polar white velvety frames**

- Labelling field

– also suitable for cable ducts

When the frame has been dismantled, the labelling field remains on the insert.

For inserts with order no. 4522, 4523, 4593, 4594, mounting of the labelling field on the supporting ring is not possible.
For this, the labelling field can be engaged in the recess of the frame.

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1051 60 99** | 10 |
| 2gang horizontal | **1022 60 99** | 10 |
| 2gang vertical | **1052 60 99** | 10 |
| 3gang horizontal | **1023 60 99** | 10 |
| 3gang vertical | **1053 60 99** | 10 |



**Aluminium velvety frames**

- Labelling field

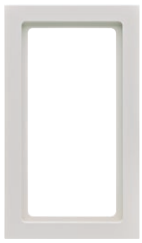
– also suitable for cable ducts

When the frame has been dismantled, the labelling field remains on the insert.

For inserts with order no. 4522, 4523, 4593, 4594, mounting of the labelling field on the supporting ring is not possible.
For this, the labelling field can be engaged in the recess of the frame.

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1051 60 94** | 10 |
| 2gang horizontal | **1022 60 94** | 10 |
| 2gang vertical | **1052 60 94** | 10 |
| 3gang horizontal | **1023 60 94** | 10 |
| 3gang vertical | **1053 60 94** | 10 |

## Frames with large cut-out



### White velvety frame

Not suitable for surface-mounted frames.

– for vertical mounting

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 29 | 26 |
| Push-button 5gang with thermostat | 7566 57 29 | 27 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 60 92** | 2 |



### Polar white velvety frame

Not suitable for surface-mounted frames.

– for vertical mounting

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 29 | 26 |
| Push-button 5gang with thermostat | 7566 57 29 | 27 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 60 99** | 2 |



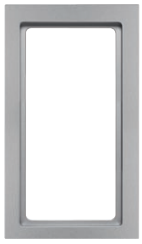
### Anthracite velvety, lacquered frame

Not suitable for surface-mounted frames.

– for vertical mounting

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 26 | 26 |
| Push-button 5gang with thermostat | 7566 57 26 | 27 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 60 96** | 1 |



### Aluminium, lacquered frame

Not suitable for surface-mounted frames.

– for vertical mounting

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 26 | 26 |
| Push-button 5gang with thermostat | 7566 57 26 | 27 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 60 94** | 1 |

## Berker Q.7 frames



### Aluminium, aluminium anodised frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | 1011 60 74 | 1 |
| 2gang | 1012 60 74 | 1 |
| 3gang | 1013 60 74 | 1 |
| 4gang | 1014 60 74 | 1 |
| 5gang | 1015 60 74 | 1 |



### Stainless steel, brushed frames

– for vertical and horizontal mounting

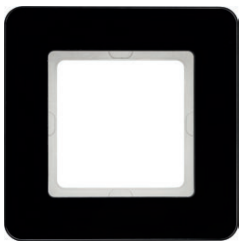
| Design | Order no. | PU |
|---|---|---|
| 1gang | 1011 60 83 | 1 |
| 2gang vertical | 1012 60 83 | 1 |
| 3gang vertical | 1013 60 83 | 1 |
| 4gang vertical | 1014 60 83 | 1 |
| 5gang vertical | 1015 60 83 | 1 |
| 2gang horizontal | 1022 60 83 | 1 |
| 3gang horizontal | 1023 60 83 | 1 |
| 4gang horizontal | 1024 60 83 | 1 |
| 5gang horizontal | 1025 60 83 | 1 |



### Glass, polar white frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | 1011 60 79 | 1 |
| 2gang | 1012 60 79 | 1 |
| 3gang | 1013 60 79 | 1 |
| 4gang | 1014 60 79 | 1 |
| 5gang | 1015 60 79 | 1 |



### Glass, black frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | 1011 60 76 | 1 |
| 2gang | 1012 60 76 | 1 |
| 3gang | 1013 60 76 | 1 |
| 4gang | 1014 60 76 | 1 |
| 5gang | 1015 60 76 | 1 |



### Anthracite, natural slate frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | 1011 60 30 | 1 |
| 2gang | 1012 60 30 | 1 |
| 3gang | 1013 60 30 | 1 |

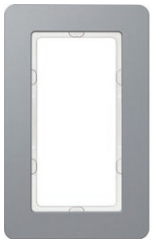


### Grey, concrete structured frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | 1011 60 20 | 1 |
| 2gang | 1012 60 20 | 1 |
| 3gang | 1013 60 20 | 1 |

## Frames with large cut-out



**Aluminium, aluminium anodised frame**

Not suitable for surface-mounted housing.

– for vertical mounting

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | 1309 60 74 | 1 |



**Stainless steel, brushed frame**

Not suitable for surface-mounted housing.

– for vertical mounting

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | 1309 60 83 | 1 |

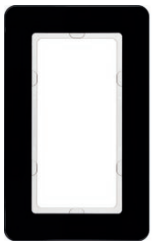


**Glass, polar white frame**

Not suitable for surface-mounted housing.

– for vertical mounting

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | 1309 60 79 | 1 |



**Glass, black frame**

Not suitable for surface-mounted housing.

– for vertical mounting

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | 1309 60 76 | 1 |



**Anthracite, natural slate frame**

Not suitable for surface-mounted housing.

– for vertical mounting

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | 1309 60 30 | 1 |



**Grey, concrete structured frame**

Not suitable for surface-mounted housing.

– for vertical mounting

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | 1309 60 20 | 1 |

## Berker K.1/K.5 frames



### Polar white glossy frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1313 70 09** | 10 |
| 2gang vertical | **1323 70 09** | 2 |
| 3gang vertical | **1333 70 09** | 2 |
| 4gang vertical | **1343 70 09** | 2 |
| 5gang vertical | **1353 70 09** | 2 |
| 2gang horizontal | **1363 70 09** | 2 |
| 3gang horizontal | **1373 70 09** | 2 |
| 4gang horizontal | **1383 70 09** | 2 |
| 5gang horizontal | **1393 70 09** | 2 |



### Anthracite matt, lacquered frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1313 70 06** | 10 |
| 2gang vertical | **1323 70 06** | 10 |
| 3gang vertical | **1333 70 06** | 2 |
| 4gang vertical | **1343 70 06** | 2 |
| 5gang vertical | **1353 70 06** | 2 |
| 2gang horizontal | **1363 70 06** | 10 |
| 3gang horizontal | **1373 70 06** | 2 |
| 4gang horizontal | **1383 70 06** | 2 |
| 5gang horizontal | **1393 70 06** | 2 |

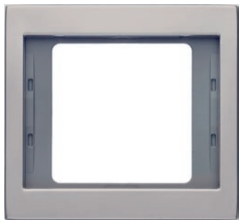


### Aluminium, aluminium anodised frames

Support plate thickness max. 2 mm

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1313 70 03** | 10 |
| 2gang vertical | **1323 70 03** | 2 |
| 3gang vertical | **1333 70 03** | 2 |
| 4gang vertical | **1343 70 03** | 2 |
| 5gang vertical | **1353 70 03** | 2 |
| 2gang horizontal | **1363 70 03** | 2 |
| 3gang horizontal | **1373 70 03** | 2 |
| 4gang horizontal | **1383 70 03** | 2 |
| 5gang horizontal | **1393 70 03** | 2 |



**Stainless steel, metal matt finish frames**

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1313 70 04** | 10 |
| 2gang vertical | **1323 70 04** | 2 |
| 3gang vertical | **1333 70 04** | 2 |
| 4gang vertical | **1343 70 04** | 2 |
| 5gang vertical | **1353 70 04** | 2 |
| 2gang horizontal | **1363 70 04** | 2 |
| 3gang horizontal | **1373 70 04** | 2 |
| 4gang horizontal | **1383 70 04** | 2 |
| 5gang horizontal | **1393 70 04** | 2 |

## Frames with large cut-out



**Polar white glossy frame**

Not suitable for surface-mounted housing.

– for vertical mounting

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 70 | 25 |
| Push-button 5gang with thermostat | 7566 57 70 | 25 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 70 09** | 1 |



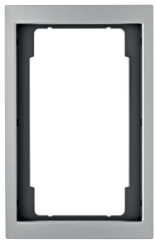
**Anthracite matt, lacquered frame**

Not suitable for surface-mounted housing.

– for vertical mounting

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 75 | 25 |
| Push-button 5gang with thermostat | 7566 57 75 | 25 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 70 06** | 1 |



**Aluminium, aluminium anodised frame**

Not suitable for surface-mounted housing.

– for vertical mounting

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 74 | 25 |
| Push-button 5gang with thermostat | 7566 57 74 | 25 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 70 03** | 1 |



**Stainless steel, metal matt finish frame**

Not suitable for surface-mounted housing.

– for vertical mounting

| Suitable for | Order no. | Page |
|---|---|---|
| Push-button 3gang with thermostat | 7566 37 73 | 25 |
| Push-button 5gang with thermostat | 7566 57 73 | 25 |

| Design | Order no. | PU |
|---|---|---|
| with large cut-out | **1309 70 04** | 1 |

## Berker R.1 frames



### Polar white glossy frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 21 89** | 10 |
| 2gang | **1012 21 89** | 2 |
| 3gang | **1013 21 89** | 2 |
| 4gang | **1014 21 89** | 2 |
| 5gang | **1015 21 89** | 2 |



### Black glossy frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 21 45** | 10 |
| 2gang | **1012 21 45** | 2 |
| 3gang | **1013 21 45** | 10 |
| 4gang | **1014 21 45** | 2 |
| 5gang | **1015 21 45** | 2 |



### Aluminium/polar white frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 21 74** | 10 |
| 2gang | **1012 21 74** | 10 |
| 3gang | **1013 21 74** | 10 |
| 4gang | **1014 21 74** | 2 |
| 5gang | **1015 21 74** | 2 |



### Aluminium/black frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 21 84** | 10 |
| 2gang | **1012 21 84** | 10 |
| 3gang | **1013 21 84** | 10 |
| 4gang | **1014 21 84** | 2 |
| 5gang | **1015 21 84** | 2 |



### Stainless steel/polar white frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 21 14** | 10 |
| 2gang | **1012 21 14** | 10 |
| 3gang | **1013 21 14** | 10 |
| 4gang | **1014 21 14** | 2 |
| 5gang | **1015 21 14** | 2 |



### Stainless steel/black frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 21 04** | 10 |
| 2gang | **1012 21 04** | 10 |
| 3gang | **1013 21 04** | 10 |
| 4gang | **1014 21 04** | 2 |
| 5gang | **1015 21 04** | 2 |



### Glass polar white frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 21 09** | 10 |
| 2gang | **1012 21 09** | 5 |
| 3gang | **1013 21 09** | 5 |
| 4gang | **1014 21 09** | 1 |
| 5gang | **1015 21 09** | 1 |



### Glass black frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 21 16** | 10 |
| 2gang | **1012 21 16** | 5 |
| 3gang | **1013 21 16** | 5 |
| 4gang | **1014 21 16** | 1 |
| 5gang | **1015 21 16** | 1 |



### Polar white glossy frames

- Labelling field



Labelling field height arranged for P-touch strips 6 mm.

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 21 79** | 10 |
| 2gang vertical | **1012 21 69** | 2 |
| 3gang vertical | **1013 21 69** | 2 |
| 2gang horizontal | **1012 21 79** | 2 |
| 3gang horizontal | **1013 21 79** | 2 |



**Black glossy frames**

- Labelling field



Labelling field height arranged for P-touch strips 6 mm.

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 21 35** | 10 |
| 2gang vertical | **1012 21 25** | 2 |
| 3gang vertical | **1013 21 25** | 2 |
| 2gang horizontal | **1012 21 35** | 2 |
| 3gang horizontal | **1013 21 35** | 2 |

## Frames made from special materials



**Anthracite/polar white glossy, natural slate frames**

Not suitable for water-protected, flush-mounted installation IP44.

Caution!
Installation only possible on a flat surface.
Tighten screws of the covers only by hand.

The colour of surface material can change when exposed to UV radiation.

Caution!
Natural product made from open-pored material, which is sensitive to grease and dirt.

- for vertical and horizontal mounting
- natural, untreated surface structure
- natural material that underscores the individual character by means of developed structures and different material thicknesses and colour schemes

| Design | Order No. | PU |
|---|---|---|
| 1gang | **1011 23 89** | 1 |
| 2gang | **1012 23 89** | 1 |
| 3gang | **1013 23 89** | 1 |



**Anthracite/black glossy, natural slate frames**

Not suitable for water-protected, flush-mounted installation IP44.

Caution!
Installation only possible on a flat surface.
Tighten screws of the covers only by hand.

The colour of surface material can change when exposed to UV radiation.

Caution!
Natural product made from open-pored material, which is sensitive to grease and dirt.

- for vertical and horizontal mounting
- natural, untreated surface structure
- natural material that underscores the individual character by means of developed structures and different material thicknesses and colour schemes

| Design | Order No. | PU |
|---|---|---|
| 1gang | **1011 23 84** | 1 |
| 2gang | **1012 23 84** | 1 |
| 3gang | **1013 23 84** | 1 |



**Grey/polar white glossy, grounded concrete frames**

Not suitable for water-protected, flush-mounted installation IP44.

Caution!
Installation only possible on a flat surface.
Tighten screws of the covers only by hand.

The colour of surface material can change when exposed to UV radiation.

Caution!
Natural product made from open-pored material, which is sensitive to grease and dirt.

- for vertical and horizontal mounting
- smoothly milled surface
- natural material that underscores the individual character by means of different structures and colour schemes

| Design | Order No. | PU |
|---|---|---|
| 1gang | **1011 23 79** | 1 |
| 2gang | **1012 23 79** | 1 |
| 3gang | **1013 23 79** | 1 |



### Grey/black glossy, grounded concrete frames

Not suitable for water-protected, flush-mounted installation IP44.

Caution!
Installation only possible on a flat surface.
Tighten screws of the covers only by hand.

The colour of surface material can change when exposed to UV radiation.

Caution!
Natural product made from open-pored material, which is sensitive to grease and dirt.

- for vertical and horizontal mounting
- smoothly milled surface
- natural material that underscores the individual character by means of different structures and colour schemes

| Design | Order No. | PU |
|---|---|---|
| 1gang | **1011 23 74** | 1 |
| 2gang | **1012 23 74** | 1 |
| 3gang | **1013 23 74** | 1 |



### Brown/polar white glossy, embossed leather frames

Not suitable for water-protected, flush-mounted installation IP44.

Patina typical for real leather can develop over time due to touch and the influence of light.

Caution!
Natural product made from open-pored material, which is sensitive to grease and dirt.

- for vertical and horizontal mounting
- structured surface
- high quality, durable material that underscores the individual character by means of different structures and colour schemes

| Design | Order No. | PU |
|---|---|---|
| 1gang | **1011 23 69** | 1 |
| 2gang | **1012 23 69** | 1 |
| 3gang | **1013 23 69** | 1 |
| 4gang | **1014 23 69** | 1 |
| 5gang | **1015 23 69** | 1 |



### Brown/black glossy, embossed leather frames

Not suitable for water-protected, flush-mounted installation IP44.

The shape of surface materials can change during changes in temperature and humidity and its colour can change when exposed to UV radiation.

Patina typical for real leather can develop over time due to touch and the influence of light.

Caution!
Natural product made from open-pored material, which is sensitive to grease and dirt.

- for vertical and horizontal mounting
- structured surface
- high quality, durable material that underscores the individual character by means of different structures and colour schemes

| Design | Order No. | PU |
|---|---|---|
| 1gang | **1011 23 64** | 1 |
| 2gang | **1012 23 64** | 1 |
| 3gang | **1013 23 64** | 1 |
| 4gang | **1014 23 64** | 1 |
| 5gang | **1015 23 64** | 1 |



### Oak/polar white glossy, stained wood frames

Not suitable for water-protected, flush-mounted installation IP44.

The shape of surface materials can change during changes in temperature and humidity and its colour can change when exposed to UV radiation.

- for vertical and horizontal mounting
- stained on bog oak
- natural material that underscores the individual character by means of different grains and colour structures

| Design | Order No. | PU |
|---|---|---|
| 1gang | **1011 23 59** | 1 |
| 2gang | **1012 23 59** | 1 |
| 3gang | **1013 23 59** | 1 |
| 4gang | **1014 23 59** | 1 |
| 5gang | **1015 23 59** | 1 |



### Oak/black glossy, stained wood frames

Not suitable for water-protected, flush-mounted installation IP44.

The shape of surface materials can change during changes in temperature and humidity and its colour can change when exposed to UV radiation.

- for vertical and horizontal mounting
- stained on bog oak
- natural material that underscores the individual character by means of different grains and colour structures

| Design | Order No. | PU |
|---|---|---|
| 1gang | **1011 23 54** | 1 |
| 2gang | **1012 23 54** | 1 |
| 3gang | **1013 23 54** | 1 |
| 4gang | **1014 23 54** | 1 |
| 5gang | **1015 23 54** | 1 |

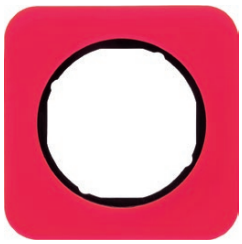


### Red transparent/polar white glossy, acrylic frames

Not suitable for water-protected, flush-mounted installation IP44.

- for vertical and horizontal mounting

| Design | Order No. | PU |
|---|---|---|
| 1gang | **1011 23 49** | 1 |
| 2gang | **1012 23 49** | 1 |
| 3gang | **1013 23 49** | 1 |
| 4gang | **1014 23 49** | 1 |
| 5gang | **1015 23 49** | 1 |



### Red transparent/black glossy, acrylic frames

Not suitable for water-protected, flush-mounted installation IP44.

- for vertical and horizontal mounting

| Design | Order No. | PU |
|---|---|---|
| 1gang | **1011 23 44** | 1 |
| 2gang | **1012 23 44** | 1 |
| 3gang | **1013 23 44** | 1 |
| 4gang | **1014 23 44** | 1 |
| 5gang | **1015 23 44** | 1 |



### Orange transparent/polar white glossy, acrylic frames

Not suitable for water-protected, flush-mounted installation IP44.

- for vertical and horizontal mounting

| Design | Order No. | PU |
|---|---|---|
| 1gang | **1011 23 39** | 1 |
| 2gang | **1012 23 39** | 1 |
| 3gang | **1013 23 39** | 1 |
| 4gang | **1014 23 39** | 1 |
| 5gang | **1015 23 39** | 1 |



### Orange transparent/black glossy, acrylic frames

Not suitable for water-protected, flush-mounted installation IP44.

- for vertical and horizontal mounting

| Design | Order No. | PU |
|---|---|---|
| 1gang | **1011 23 34** | 1 |
| 2gang | **1012 23 34** | 1 |
| 3gang | **1013 23 34** | 1 |
| 4gang | **1014 23 34** | 1 |
| 5gang | **1015 23 34** | 1 |

## Berker R.3 frames



### Polar white glossy frames

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 22 89** | 10 |
| 2gang | **1012 22 89** | 2 |
| 3gang | **1013 22 89** | 2 |
| 4gang | **1014 22 89** | 2 |
| 5gang | **1015 22 89** | 2 |



### Black glossy frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 22 45** | 10 |
| 2gang | **1012 22 45** | 2 |
| 3gang | **1013 22 45** | 10 |
| 4gang | **1014 22 45** | 2 |
| 5gang | **1015 22 45** | 2 |



### Aluminium/polar white frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 22 74** | 10 |
| 2gang | **1012 22 74** | 10 |
| 3gang | **1013 22 74** | 10 |
| 4gang | **1014 22 74** | 2 |
| 5gang | **1015 22 74** | 2 |



## Aluminium/black frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 22 84** | 10 |
| 2gang | **1012 22 84** | 10 |
| 3gang | **1013 22 84** | 10 |
| 4gang | **1014 22 84** | 2 |
| 5gang | **1015 22 84** | 2 |



## Stainless steel/polar white frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 22 14** | 10 |
| 2gang | **1012 22 14** | 10 |
| 3gang | **1013 22 14** | 10 |
| 4gang | **1014 22 14** | 2 |
| 5gang | **1015 22 14** | 2 |



## Stainless steel/black frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 22 04** | 10 |
| 2gang | **1012 22 04** | 10 |
| 3gang | **1013 22 04** | 10 |
| 4gang | **1014 22 04** | 2 |
| 5gang | **1015 22 04** | 2 |



## Glass polar white frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 22 09** | 10 |
| 2gang | **1012 22 09** | 5 |
| 3gang | **1013 22 09** | 5 |
| 4gang | **1014 22 09** | 1 |
| 5gang | **1015 22 09** | 1 |



## Glass black frames

– for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 22 16** | 10 |
| 2gang | **1012 22 16** | 5 |
| 3gang | **1013 22 16** | 5 |
| 4gang | **1014 22 16** | 1 |
| 5gang | **1015 22 16** | 1 |



### Polar white glossy frames

- Labelling field



Labelling field height arranged for P-touch strips 6 mm.

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 22 79** | 10 |
| 2gang vertical | **1012 22 69** | 2 |
| 3gang vertical | **1013 22 69** | 2 |
| 2gang horizontal | **1012 22 79** | 2 |
| 3gang horizontal | **1013 22 79** | 2 |



### Black glossy frames

- Labelling field



Labelling field height arranged for P-touch strips 6 mm.

| Design | Order no. | PU |
|---|---|---|
| 1gang | **1011 22 35** | 10 |
| 2gang vertical | **1012 22 25** | 2 |
| 3gang vertical | **1013 22 25** | 2 |
| 2gang horizontal | **1012 22 35** | 2 |
| 3gang horizontal | **1013 22 35** | 2 |

## systo frames



### White frames

– UV resistant material with antistatic texture

- accurate mounting thanks to clip steps
- slots to remove the frame on the side
- available in 57 or 71 mm center distance

| Design | Order no. | PU |
|---|---|---|
| single, 2 modules | **WS401** | 10 |
| double horizontal, 2 x 2 modules | **WS402** | 10 |
| triple horizontal, 3 x 2 modules (71 mm) | **WS403** | 5 |
| quadruple horizontal, 4 x 2 modules (71 mm) | **WS404** | 1 |
| double vertical, 2 x 2 modules (57 mm) | **WS406** | 10 |
| double vertical, 2 x 2 modules (71 mm) | **WS408** | 1 |
| triple vertical, 3 x 2 modules (57 mm) | **WS407** | 5 |
| triple vertical, 3 x 2 modules (71 mm) | **WS409** | 5 |
| quadruple horizontal, 4 x 2 modules (57 mm) | **WS410** | 10 |
| horizontal, 6 modules (57 mm) | **WS411** | 5 |
| horizontal, 5 modules (71 mm) | **WS412** | 10 |
| horizontal, 8 modules (71 mm) | **WS413** | 5 |
| horizontal, 16 (2 x 8) modules (57 mm) | **WS416** | 5 |



### Aluminium frames

– UV resistant material with antistatic texture

- accurate mounting thanks to clip steps
- slots to remove the frame on the side
- available in 57 or 71 mm center distance

| Design | Order no. | PU |
|---|---|---|
| single, 2 modules | **WS401T** | 10 |
| double horizontal, 2 x 2 modules | **WS402T** | 10 |
| triple horizontal, 3 x 2 modules (71 mm) | **WS403T** | 5 |
| quadruple horizontal, 4 x 2 modules (71 mm) | **WS404T** | 1 |
| double vertical, 2 x 2 modules (57 mm) | **WS406T** | 10 |
| double vertical, 2 x 2 modules (71 mm) | **WS408T** | 1 |
| triple vertical, 3 x 2 modules (57 mm) | **WS407T** | 5 |
| triple vertical, 3 x 2 modules (71 mm) | **WS409T** | 5 |
| quadruple horizontal, 4 x 2 modules (57 mm) | **WS410T** | 10 |
| horizontal, 6 modules (57 mm) | **WS411T** | 5 |
| horizontal, 5 modules (71 mm) | **WS412T** | 10 |
| horizontal, 8 modules (71 mm) | **WS413T** | 5 |
| horizontal, 16 (2 x 8) modules (57 mm) | **WS416T** | 5 |

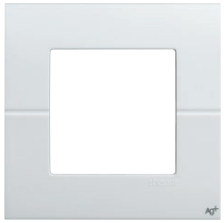


### Black frames

– UV resistant material with antistatic texture

- accurate mounting thanks to clip steps
- slots to remove the frame on the side
- available in 57 or 71 mm center distance

| Design | Order no. | PU |
|---|---|---|
| single, 2 modules | **WS401N** | 10 |
| double horizontal, 2 x 2 modules | **WS402N** | 10 |
| triple horizontal, 3 x 2 modules (71 mm) | **WS403N** | 5 |
| quadruple horizontal, 4 x 2 modules (71 mm) | **WS404N** | 1 |
| double vertical, 2 x 2 modules (71 mm) | **WS408N** | 1 |
| triple vertical, 3 x 2 modules (71 mm) | **WS409N** | 5 |
| quadruple horizontal, 4 x 2 modules (57 mm) | **WS410N** | 10 |
| horizontal, 6 modules (57 mm) | **WS411N** | 5 |
| horizontal, 5 modules (71 mm) | **WS412N** | 10 |
| horizontal, 8 modules (71 mm) | **WS413N** | 5 |
| horizontal, 16 (2 x 8) modules (57 mm) | **WS416N** | 5 |



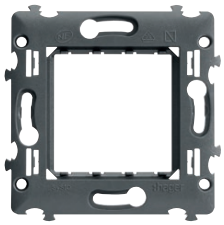
**Antibacterial frames**

– UV resistant material with antistatic texture

- accurate mounting thanks to clip steps
- slots to remove the frame on the side
- available in 57 or 71 mm center distance

| Design | Order no. | PU |
|---|---|---|
| single, 2 modules | **WS401H** | 10 |
| double horizontal, 2 x 2 modules | **WS402H** | 10 |
| triple horizontal, 3 x 2 modules (71 mm) | **WS403H** | 5 |
| quadruple horizontal, 4 x 2 modules (71 mm) | **WS404H** | 1 |
| double vertical, 2 x 2 modules (57 mm) | **WS406H** | 10 |
| double vertical, 2 x 2 modules (71 mm) | **WS408H** | 1 |
| triple vertical, 3 x 2 modules (57 mm) | **WS407H** | 5 |
| triple vertical, 3 x 2 modules (71 mm) | **WS409H** | 5 |
| quadruple horizontal, 4 x 2 modules (57 mm) | **WS410H** | 10 |
| horizontal, 6 modules (57 mm) | **WS411H** | 5 |

## Adaptor rings systo



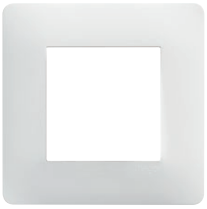
**Adaptor rings**

– To use with 45 x 45 mechanisms in standard boxes

- accurate mounting thanks to clip steps
- slots to remove the frame on the side
- available in 57 or 71 mm center distance

| Design | Order no. | PU |
|---|---|---|
| 2 modules, with screws | **WS450** | 10 |
| 2 modules, with claws-breakable | **WS451** | 10 |
| 2 modules, with screw-breakable | **WS451S** | 10 |
| 4 modules, with screws, for WS410 | **WS452** | 10 |
| 5 modules, with screws, for WS412 | **WS454** | 10 |
| 6 modules, with screws, for WS411 | **WS453** | 5 |
| 8 modules, with screws, for WS413 | **WS455** | 5 |
| 16 modules (2 x 8 horizontal), with screws, for WS416 | **WS456** | 5 |

## essensya frames



### White frames

– UV resistant material with antistatic texture

- accurate mounting thanks to clip steps
- slots to remove the frame on the side
- available in 57 or 71 mm center distance

| Design | Order no. | PU |
|---|---|---|
| single | **WE401** | 10 |
| double horizontal or vertical (71 mm) | **WE402** | 10 |
| triple horizontal or vertical (71 mm) | **WE403** | 5 |
| quadruple horizontal or vertical (71 mm) | **WE404** | 1 |
| double vertical (57 mm) | **WE406** | 10 |
| triple vertical (57 mm) | **WE407** | 5 |

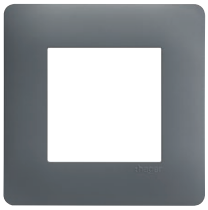


### Black frames

– UV resistant material with antistatic texture

- accurate mounting thanks to clip steps
- slots to remove the frame on the side
- available in 57 or 71 mm center distance

| Design | Order no. | PU |
|---|---|---|
| single | **WE401N** | 10 |
| double horizontal or vertical (71 mm) | **WE402N** | 10 |



### Grey frames

– UV resistant material with antistatic texture

- accurate mounting thanks to clip steps
- slots to remove the frame on the side
- available in 57 or 71 mm center distance

| Design | Order no. | PU |
|---|---|---|
| single | **WE421** | 1 |
| double horizontal or vertical (71 mm) | **WE422** | 1 |
| triple horizontal or vertical (71 mm) | **WE423** | 1 |
| quadruple horizontal or vertical (71 mm) | **WE424** | 1 |
| double vertical (57 mm) | **WE426** | 1 |
| triple vertical (57 mm) | **WE427** | 1 |



### Sand frames

– UV resistant material with antistatic texture

- accurate mounting thanks to clip steps
- slots to remove the frame on the side
- available in 57 or 71 mm center distance

| Design | Order no. | PU |
|---|---|---|
| single | **WE431** | 1 |
| double horizontal or vertical (71 mm) | **WE432** | 1 |
| triple horizontal or vertical (71 mm) | **WE433** | 1 |
| quadruple horizontal or vertical (71 mm) | **WE434** | 1 |
| double vertical (57 mm) | **WE436** | 1 |
| triple vertical (57 mm) | **WE437** | 1 |

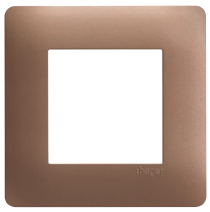


## Blue frames

– UV resistant material with antistatic texture

- accurate mounting thanks to clip steps
- slots to remove the frame on the side
- available in 57 or 71 mm center distance

| Design | Order no. | PU |
|---|---|---|
| single | **WE441** | 1 |
| double horizontal or vertical (71 mm) | **WE442** | 1 |
| triple horizontal or vertical (71 mm) | **WE443** | 1 |
| quadruple horizontal or vertical (71 mm) | **WE444** | 1 |
| double vertical (57 mm) | **WE446** | 1 |
| triple vertical (57 mm) | **WE447** | 1 |

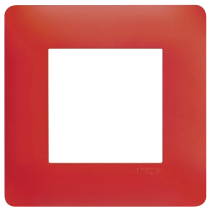


## Bronze frames

– UV resistant material with antistatic texture

- accurate mounting thanks to clip steps
- slots to remove the frame on the side
- available in 57 or 71 mm center distance

| Design | Order no. | PU |
|---|---|---|
| single | **WE461** | 1 |
| double horizontal or vertical (71 mm) | **WE462** | 1 |
| triple horizontal or vertical (71 mm) | **WE463** | 1 |
| quadruple horizontal or vertical (71 mm) | **WE464** | 1 |
| double vertical (57 mm) | **WE466** | 1 |
| triple vertical (57 mm) | **WE467** | 1 |



## Red frames

– UV resistant material with antistatic texture

- accurate mounting thanks to clip steps
- slots to remove the frame on the side
- available in 57 or 71 mm center distance

| Design | Order no. | PU |
|---|---|---|
| single | **WE471** | 1 |
| double horizontal or vertical (71 mm) | **WE472** | 1 |
| triple horizontal or vertical (71 mm) | **WE473** | 1 |
| quadruple horizontal or vertical (71 mm) | **WE474** | 1 |
| double vertical (57 mm) | **WE476** | 1 |
| triple vertical (57 mm) | **WE477** | 1 |



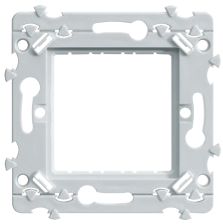
## Titane frames

– UV resistant material with antistatic texture

- accurate mounting thanks to clip steps
- slots to remove the frame on the side
- available in 57 or 71 mm center distance

| Design | Order no. | PU |
|---|---|---|
| single | **WE491** | 1 |
| double horizontal or vertical (71 mm) | **WE492** | 1 |
| triple horizontal or vertical (71 mm) | **WE493** | 1 |
| quadruple horizontal or vertical (71 mm) | **WE494** | 1 |
| double vertical (57 mm) | **WE496** | 1 |
| triple vertical (57 mm) | **WE497** | 1 |

## Adaptor rings essensya



**Adaptor rings**

– To use with 45 x 45 mechanisms in standard boxes

- accurate mounting thanks to clip steps
- slots to remove the frame on the side
- available in 57 or 71 mm center distance

| Design | Order no. | PU |
|---|---|---|
| 2 modules, with screws | **WE450** | 10 |

# Berker B.IQ

A wide array of alternative materials and colours have been added to the convenient variety of KNX functionality of the Berker B.IQ.

- Frameless KNX push-button with full-material rockers (glass, stainless steel and aluminium)
- High scope of functions in the KNX applications through devices integrating thermostats
- The attractive appearance is rounded off using white status LEDs and a blue operation LED
- Suitable variants for all materials and colours of sockets in the Berker B.7 switch range.



# 02

Page


| | |
|---|---|
| Push-buttons | 78 |
| Light scenes push-buttons | 81 |
| Push-buttons with thermostat | 82 |
| Labelling fields | 84 |

– For suitable frames in the same “style” for additional applications, see the Design line B.7
– For additional products to complement the installation in matching colours/materials, refer to the Design platform S.1/B.x

## Push-buttons

– For switch, push-button, dimmer and shutter functions
– Extension unit for light scene push-button
– For installation in single standard wall boxes
– With dismantling protection




### Bus coupling unit flush-mounted

| | |
|---|---|
| Operating voltage over bus | 21 ... 32 V= |
| Power consumption, KNX | ≈ 100 mW |
| Operating temperature | -5 ... +45 °C |
| Insertion depth | 23 mm |

– with programming button and red programming LED
– as interface between KNX user module and bus line
– bus connection via connecting terminal
– without spreader claws

| Design | Order no. | PU |
|---|---|---|
| Bus coupling unit flush-mounted | **7504 00 01** | 1 |



### B.IQ push-button 1gang comfort

| | |
|---|---|
| Operating temperature | -5 ... +45 °C |
| Dimensions (W x H) | 88.5 x 88.5 mm |

– single and two push-button operation parameterisable
– one push-button operation for switching, pushing, shutters and dimming
– activation of second user level via object
– with blue operation LED and 2 white status LEDs (labelling field lighting)
– alarm telegram after disconnection from bus coupling unit 1 bit or 1 byte
– cyclic transmission can also be started via switching object
– value transmitter for dimming, position, brightness and temperature values 1 and 2 byte

| **Suitable for** | **Order no.** | **Page** |
|---|---|---|
| Bus coupling unit flush-mounted | 7504 00 01 | 78 |
| **optional** | | |
| B.IQ labelling field for push-buttons 1 to 3gang | 7590 00 80 | 84 |

| Design | Order no. | PU |
|---|---|---|
| polar white matt | **7516 15 99** | 1 |
| aluminium, aluminium anodised | **7516 15 94** | 1 |
| stainless steel, metal brushed | **7516 15 93** | 1 |
| glass polar white | **7516 15 90** | 1 |
| glass black | **7516 15 92** | 1 |



### B.IQ push-button 2gang comfort

| | |
|---|---|
| Operating temperature | -5 ... +45 °C |
| Dimensions (W x H) | 88.5 x 88.5 mm |

– single and two push-button operation parameterisable
– one push-button operation for switching, pushing, shutters and dimming
– activation of second user level via object
– with blue operation LED and 4 white status LEDs (labelling field lighting)
– alarm telegram after disconnection from bus coupling unit 1 bit or 1 byte
– cyclic transmission can also be started via switching object
– value transmitter for dimming, position, brightness and temperature values 1 and 2 byte

| **Suitable for** | **Order no.** | **Page** |
|---|---|---|
| Bus coupling unit flush-mounted | 7504 00 01 | 78 |
| **optional** | | |
| B.IQ labelling field for push-buttons 1 to 3gang | 7590 00 80 | 84 |

| Design | Order no. | PU |
|---|---|---|
| polar white matt | **7516 25 99** | 1 |
| aluminium, aluminium anodised | **7516 25 94** | 1 |
| stainless steel, metal brushed | **7516 25 93** | 1 |
| glass polar white | **7516 25 90** | 1 |
| glass black | **7516 25 92** | 1 |



### B.IQ push-button 3gang comfort

| | |
|---|---|
| Operating temperature | -5 ... +45 °C |
| Dimensions (W x H) | 88.5 x 88.5 mm |

- single and two push-button operation parameterisable
- one push-button operation for switching, pushing, shutters and dimming
- activation of second user level via object
- with blue operation LED and 6 white status LEDs (labelling field lighting)
- alarm telegram after disconnection from bus coupling unit 1 bit or 1 byte
- cyclic transmission can also be started via switching object
- value transmitter for dimming, position, brightness and temperature values 1 and 2 byte

| Suitable for | Order no. | Page |
|---|---|---|
| Bus coupling unit flush-mounted | 7504 00 01 | 78 |
| **optional** | | |
| B.IQ labelling field for push-buttons 1 to 3gang | 7590 00 80 | 84 |

| Design | Order no. | PU |
|---|---|---|
| polar white matt | **7516 35 99** | 1 |
| aluminium, aluminium anodised | **7516 35 94** | 1 |
| stainless steel, metal brushed | **7516 35 93** | 1 |
| glass polar white | **7516 35 90** | 1 |
| glass black | **7516 35 92** | 1 |



### B.IQ push-button 4gang comfort

| | |
|---|---|
| Operating temperature | -5 ... +45 °C |
| Dimensions (W x H) | 88.5 x 118.1 mm |

- single and two push-button operation parameterisable
- lockable via 3-button actuation
- one push-button operation for switching, pushing, shutters and dimming
- second operating level via object or 3-button handle
- with blue operation LED and 8 white status LEDs (labelling field lighting)
- alarm telegram after disconnection from bus coupling unit 1 bit or 1 byte
- cyclic transmission can also be started via switching object
- value transmitter for dimming, position, brightness and temperature values 1 and 2 byte

| Suitable for | Order no. | Page |
|---|---|---|
| Bus coupling unit flush-mounted | 7504 00 01 | 78 |
| **optional** | | |
| B.IQ labelling field for push-buttons 4gang | 7590 00 81 | 84 |

| Design | Order no. | PU |
|---|---|---|
| polar white matt | **7516 45 99** | 1 |
| aluminium, aluminium anodised | **7516 45 94** | 1 |
| stainless steel, metal brushed | **7516 45 93** | 1 |
| glass polar white | **7516 45 90** | 1 |
| glass black | **7516 45 92** | 1 |



### B.IQ push-button 1gang

| | |
|---|---|
| Operating temperature | -5 ... +45 °C |
| Dimensions (W x H) | 88.5 x 88.5 mm |

- with blue operation LED and 2 white status LEDs (labelling field lighting)
- dimming / position value transmitter 1 byte

| Suitable for | Order no. | Page |
|---|---|---|
| Bus coupling unit flush-mounted | 7504 00 01 | 78 |
| **optional** | | |
| B.IQ labelling field for push-buttons 1 to 3gang | 7590 00 80 | 84 |

| Design | Order no. | PU |
|---|---|---|
| polar white matt | **7516 10 99** | 1 |
| aluminium, aluminium anodised | **7516 10 94** | 1 |
| stainless steel, metal brushed | **7516 10 93** | 1 |
| glass polar white | **7516 10 90** | 1 |
| glass black | **7516 10 92** | 1 |



### B.IQ push-button 2gang

Operating temperature -5 ... +45 °C
Dimensions (W x H) 88.5 x 88.5 mm

– with blue operation LED and 4 white status LEDs (labelling field lighting)
– dimming / position value transmitter 1 byte

| Suitable for | Order no. | Page |
|---|---|---|
| Bus coupling unit flush-mounted | 7504 00 01 | 78 |
| **optional** | | |
| B.IQ labelling field for push-buttons 1 to 3gang | 7590 00 80 | 84 |

| Design | Order no. | PU |
|---|---|---|
| polar white matt | **7516 20 99** | 1 |
| aluminium, aluminium anodised | **7516 20 94** | 1 |
| stainless steel, metal brushed | **7516 20 93** | 1 |
| glass polar white | **7516 20 90** | 1 |
| glass black | **7516 20 92** | 1 |



### B.IQ push-button 3gang

Operating temperature -5 ... +45 °C
Dimensions (W x H) 88.5 x 88.5 mm

– with blue operation LED and 6 white status LEDs (labelling field lighting)
– dimming / position value transmitter 1 byte

| Suitable for | Order no. | Page |
|---|---|---|
| Bus coupling unit flush-mounted | 7504 00 01 | 78 |
| **optional** | | |
| B.IQ labelling field for push-buttons 1 to 3gang | 7590 00 80 | 84 |

| Design | Order no. | PU |
|---|---|---|
| polar white matt | **7516 30 99** | 1 |
| aluminium, aluminium anodised | **7516 30 94** | 1 |
| stainless steel, metal brushed | **7516 30 93** | 1 |
| glass polar white | **7516 30 90** | 1 |
| glass black | **7516 30 92** | 1 |



### B.IQ push-button 4gang

Operating temperature -5 ... +45 °C
Dimensions (W x H) 88.5 x 118.1 mm

– with blue operation LED and 8 white status LEDs (labelling field lighting)
– dimming / position value transmitter 1 byte

| Suitable for | Order no. | Page |
|---|---|---|
| Bus coupling unit flush-mounted | 7504 00 01 | 78 |
| **optional** | | |
| B.IQ labelling field for push-buttons 4gang | 7590 00 81 | 84 |

| Design | Order no. | PU |
|---|---|---|
| polar white matt | **7516 40 99** | 1 |
| aluminium, aluminium anodised | **7516 40 94** | 1 |
| stainless steel, metal brushed | **7516 40 93** | 1 |
| glass polar white | **7516 40 90** | 1 |
| glass black | **7516 40 92** | 1 |

## Light scenes push-buttons



### B.IQ push-button 4gang for light scenes

| | |
|---|---|
| Number of load groups (increase on cascading) | 8 |
| Light scenes | max. 8 |
| Operating temperature | -5 ... +45 °C |
| Dimensions (W x H) | 88.5 x 118.1 mm |

- retrieval, adjustment and storage of 8 light scenes
- light scene push-buttons can be cascaded
- second operating level for setting load groups via 3-button actuation
- with blue operation LED and 8 white status LEDs (labelling field lighting)
- dimming / position value transmitter 1 byte
- for installation in single standard wall boxes
- with anti-dismantling protection

| **Suitable for** | **Order no.** | **Page** |
|---|---|---|
| Bus coupling unit flush-mounted | 7504 00 01 | 78 |
| **optional** | | |
| B.IQ labelling field for push-buttons 4gang | 7590 00 81 | 84 |

| Design | Order no. | PU |
|---|---|---|
| polar white matt | **7516 86 99** | 1 |
| aluminium, aluminium anodised | **7516 86 94** | 1 |
| stainless steel, metal brushed | **7516 86 93** | 1 |
| glass polar white | **7516 86 90** | 1 |
| glass black | **7516 86 92** | 1 |

## Push-buttons with thermostat

- For switch, push-button, dimmer, blind and thermostat functions
- Single and two push-button operation parameterisable
- One push-button operation for switching, buttons, blinds and dimming
- Extension unit for light scene push-button
- With 2 white status LEDs per rocker (labelling field illumination)
- With blue operation LED
- For individual single room temperature control
- For heating and/or cooling mode with/without auxiliary step
- Controller operating modes: comfort, standby, night and frost/heat protection mode
- With 2 additional function buttons for display control
- Display of operating mode, controller lockout, room and outside temperature as well as time in connection with a clock
- Temperature measurement via internal temperature sensor and/or external communication object (weighting ratio parameterisable)
- Provision of the internal temperature value via communication object
- With room temperature timer and 2-week timer functions
- Button help function can be activated
- For installation in single standard wall boxes
- For continuous (PI) or switched (2-point) control of max. 2 control circuits
- With dismantling protection
- Text display (ASCII-format)
- LC display with symbols and illumination switchable via object
- With button blocking function
- End customer display scope parameterisable
- Separate object for window contact
- Programmable from ETS2, V1.2a
- Alarm telegram after disconnection from bus coupling unit 1 bit, 1 or 2 byte
- Presence button parameterisable to extend comfort
- Value transmitter for dimming, position, brightness and temperature values 1 and 2 byte




### Flush-mounted bus coupling unit for B.IQ with thermostat

| | |
|---|---|
| Operating voltage over bus | 21 ... 32 V= |
| Operating temperature | -5 ... +45 °C |
| Insertion depth | 20 mm |

- for B.IQ push-buttons with thermostat and display or Bluetooth gateways
- with programming button and red programming LED
- bus connection via connecting terminal
- without spreader claws

| Design | Order no. | PU |
|---|---|---|
| flush-mounted bus coupling unit for B.IQ with thermostat | **7504 00 03** | 1 |



### B.IQ push-button 3gang with thermostat

- Display




| | |
|---|---|
| Operating temperature | -5 ... +45 °C |
| Dimensions (W x H) | 88.5 x 119.6 mm |

| Suitable for | Order no. | Page |
|---|---|---|
| Flush-mounted bus coupling unit for B.IQ with thermostat | 7504 00 03 | 82 |
| **optional** | | |
| B.IQ labelling field for push-buttons 1 to 3gang | 7590 00 80 | 84 |

| Design | Order no. | PU |
|---|---|---|
| polar white matt | **7566 35 99** | 1 |
| aluminium, aluminium anodised | **7566 35 94** | 1 |
| stainless steel, metal brushed | **7566 35 93** | 1 |
| glass polar white | **7566 35 90** | 1 |
| glass black | **7566 35 92** | 1 |



### B.IQ push-button 4gang with thermostat

- Display

Operating temperature -5 ... +45 °C
Dimensions (W x H) 88.5 x 149.2 mm

| Suitable for | Order no. | Page |
|---|---|---|
| Flush-mounted bus coupling unit for B.IQ with thermostat | 7504 00 03 | 82 |
| **optional** | | |
| B.IQ labelling field for push-buttons 4gang | 7590 00 81 | 84 |

| Design | Order no. | PU |
|---|---|---|
| polar white matt | **7566 45 99** | 1 |
| aluminium, aluminium anodised | **7566 45 94** | 1 |
| stainless steel, metal brushed | **7566 45 93** | 1 |
| glass polar white | **7566 45 90** | 1 |
| glass black | **7566 45 92** | 1 |



### B.IQ push-button 5gang with thermostat

- Display

Operating temperature -5 ... +45 °C
Dimensions (W x H) 88.5 x 178.8 mm

| Suitable for | Order no. | Page |
|---|---|---|
| Flush-mounted bus coupling unit for B.IQ with thermostat | 7504 00 03 | 82 |
| **optional** | | |
| B.IQ labelling field for push-buttons 5gang | 7590 00 82 | 84 |

| Design | Order no. | PU |
|---|---|---|
| polar white matt | **7566 55 99** | 1 |
| aluminium, aluminium anodised | **7566 55 94** | 1 |
| stainless steel, metal brushed | **7566 55 93** | 1 |
| glass polar white | **7566 55 90** | 1 |
| glass black | **7566 55 92** | 1 |



### B.IQ IR push-button 3gang with thermostat

- Display

– IR telegram with RC5 coding parameterisable per push-button

Operating temperature -5 ... +45 °C
Dimensions (W x H) 88.5 x 128.6 mm

| Suitable for | Order no. | Page |
|---|---|---|
| Flush-mounted bus coupling unit for B.IQ with thermostat | 7504 00 03 | 82 |
| **optional** | | |
| B.IQ labelling field for push-buttons 1 to 3gang | 7590 00 80 | 84 |

| Design | Order no. | PU |
|---|---|---|
| polar white matt | **7566 36 99** | 1 |
| aluminium, aluminium anodised | **7566 36 94** | 1 |
| stainless steel, metal brushed | **7566 36 93** | 1 |
| glass polar white | **7566 36 90** | 1 |
| glass black | **7566 36 92** | 1 |



### B.IQ IR push-button 4gang with thermostat

- Display

– IR telegram with RC5 coding parameterisable per push-button

Operating temperature -5 ... +45 °C
Dimensions (W x H) 88.5 x 158.2 mm

| Suitable for | Order no. | Page |
|---|---|---|
| Flush-mounted bus coupling unit for B.IQ with thermostat | 7504 00 03 | 82 |
| **optional** | | |
| B.IQ labelling field for push-buttons 4gang | 7590 00 81 | 84 |

| Design | Order no. | PU |
|---|---|---|
| polar white matt | **7566 46 99** | 1 |
| aluminium, aluminium anodised | **7566 46 94** | 1 |
| stainless steel, metal brushed | **7566 46 93** | 1 |
| glass polar white | **7566 46 90** | 1 |
| glass black | **7566 46 92** | 1 |



### B.IQ IR push-button 5gang with thermostat

- Display




| | |
|---|---|
| Operating temperature | -5 ... +45 °C |
| Dimensions (W x H) | 88.5 x 187.8 mm |

– IR telegram with RC5 coding parameterisable per push-button

| Suitable for | Order no. | Page |
|---|---|---|
| Flush-mounted bus coupling unit for B.IQ with thermostat | 7504 00 03 | 82 |
| **optional** | | |
| B.IQ labelling field for push-buttons 5gang | 7590 00 82 | 84 |

| Design | Order no. | PU |
|---|---|---|
| polar white matt | **7566 56 99** | 1 |
| aluminium, aluminium anodised | **7566 56 94** | 1 |
| stainless steel, metal brushed | **7566 56 93** | 1 |
| glass polar white | **7566 56 90** | 1 |
| glass black | **7566 56 92** | 1 |

## Labelling fields



### B.IQ labelling field for push-buttons 1 to 3gang

Dimensions (W x H x D) 151.6 x 85 x 5.7 mm

– can be illuminated by status LED

| Design | Order no. | PU |
|---|---|---|
| clear, transparent | **7590 00 80** | 1 |



### B.IQ labelling field for push-buttons 4gang

Dimensions (W x H x D) 151.6 x 114.6 x 5.7 mm

– can be illuminated by status LED

| Design | Order no. | PU |
|---|---|---|
| clear, transparent | **7590 00 81** | 1 |



### B.IQ labelling field for push-buttons 5gang

Dimensions (W x H x D) 151.6 x 144.2 x 5.7 mm

– can be illuminated by status LED

| Design | Order no. | PU |
|---|---|---|
| clear, transparent | **7590 00 82** | 1 |

# Berker TS Sensor

Understatement is an art, and the Berker TS Sensor makes it perfect. Up to eight functions are concealed under a pure surface that is practically flush with the wall, and can be custom-labelled on request. A single touch is all it takes to control lights, heating or blinds. In this way, the Berker TS Sensor can offer an exciting variety of possibilities – and, at the same time, still seems as calm as possible.



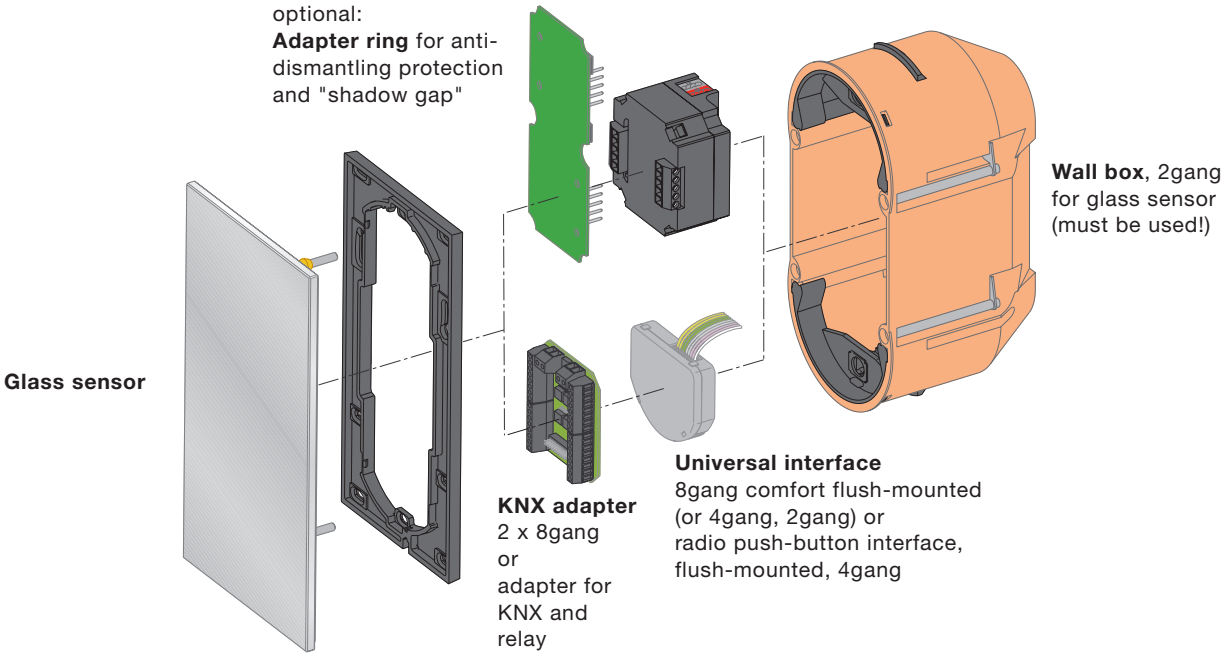
# 03

Page


| | |
|---|---|
| Glass sensors | 89 |
| Supplementary products | 92 |

### Mounting

Glass sensors are snapped in place on a "wall box, 2gang, for glass sensor" using adjustable retaining pins in such a way that the glass sensors are seated almost on the wall. The supplied adapter ring provides anti-dismantling protection and gives the glass plate shadow contours. The adjustable retaining pins can be used to compensate for deviating installation depths or irregularities of the wall of up to 20 mm.




### Connection

The glass sensor is connected to the interfaces of the respective systems via an adapter using a ribbon cable (see information for ordering and use). The separate power supply must be connected to the respective adapter.




### Connection

The glass sensor with room thermostat is connected directly to the KNX and separate power supply using the connecting terminals located on the backside.

### Removal

To pull glass sensors out of the clamp springs of the wall box, use the supplied dismantling aid with suction cups.

# Glass sensors

## Glass sensors comfort

- With integrated bus coupling unit
- Operation by gently touching the sensor surfaces on the white LEDs
- For switch, push-button, dimmer and shutter functions
- Single and two push-button operation parameterisable
- Retrieval, setting and storing of 8 light scenes
- One push-button operation for switching, buttons, blinds and dimming
- Extension unit for light scene push-button
- Integrated temperature sensor
- Temperature measurement via internal and/or external temperature sensor with mean value formation
- Additional connection for external temperature sensor
- Usable as thermostat extension unit
- Provision of the internal temperature value via communication object
- Blocking function for sensor surface e.g. for cleaning the glass surface
- Value transmitter for dimming, position, brightness and temperature values 1 and 2 byte
- Bus connection via connecting terminal
- For vertical mounting
- For mounting, always use the flat 2gang wall box, order no. 1871
- With adapter ring for dismantling protection, shadow jointing and special installation conditions
- With disassembly suction tool
- For individually labelled glass and touch sensors (configured variations), the Web Configurator generates a layout number, which must be additionally specified when placing the order.
- Many options for labelling (text and/or icons) are available via the **web configurator** at http://ts-glas-sensor.berker.de



### Glass sensor 1gang comfort

- integrated bus coupling unit



| | |
|---|---|
| Operating voltage | 21 ... 32 V= |
| Current consumption | 12.5 mA |
| Operating temperature | -5 ... +45 °C |
| Dimensions (W x H x D) | 86 x 160 x 5.7 mm |

Only suitable for KNX.

- with blue operation LED and 2 white status LEDs
- for additional products to complement the installation in matching colours/materials, refer to the Design platform S.1/B.x
- for glass frames in the same “style” for additional applications, see the Design line B.7

| Suitable for | Order no. | Page |
|---|---|---|
| Wall box 2gang flat | 1871 | 92 |
| **optional** | | |
| Temperature sensor | 161 | 39 |

| Design | Order no. | PU |
|---|---|---|
| **Berker TS Sensor** | | |
| glass polar white | **7514 18 30** | 1 |
| glass black | **7514 18 35** | 1 |
| glass aluminium | **7514 10 34** | 1 |
| **Berker TS Sensor - configured** | | |
| glass polar white | **7514 19 30** | 1 |
| glass black | **7514 19 35** | 1 |
| glass aluminium | **7514 11 34** | 1 |



### Glass sensor 2gang comfort

- integrated bus coupling unit



| | |
|---|---|
| Operating voltage | 21 ... 32 V= |
| Current consumption | 12.5 mA |
| Operating temperature | -5 ... +45 °C |
| Dimensions (W x H x D) | 86 x 160 x 5.7 mm |

Only suitable for KNX.

- with blue operation LED and 4 white status LEDs
- for additional products to complement the installation in matching colours/materials, refer to the Design platform S.1/B.x
- for glass frames in the same “style” for additional applications, see the Design line B.7

| Suitable for | Order no. | Page |
|---|---|---|
| Wall box 2gang flat | 1871 | 92 |
| **optional** | | |
| Temperature sensor | 161 | 39 |

| Design | Order no. | PU |
|---|---|---|
| **Berker TS Sensor** | | |
| glass polar white | **7514 28 30** | 1 |
| glass black | **7514 28 35** | 1 |
| glass aluminium | **7514 20 34** | 1 |

| Berker TS Sensor - configured | | |
|---|---|---|
| glass polar white | **7514 29 30** | 1 |
| glass black | **7514 29 35** | 1 |
| glass aluminium | **7514 21 34** | 1 |



**Glass sensor 3gang comfort**

- integrated bus coupling unit



| | |
|---|---|
| Operating voltage | 21 ... 32 V= |
| Current consumption | 12.5 mA |
| Operating temperature | -5 ... +45 °C |
| Dimensions (W x H x D) | 86 x 160 x 5.7 mm |

Only suitable for KNX.

– with blue operation LED and 6 white status LEDs
– for additional products to complement the installation in matching colours/materials, refer to the Design platform S.1/B.x
– for glass frames in the same “style” for additional applications, see the Design line B.7

| Suitable for | Order no. | Page |
|---|---|---|
| Wall box 2gang flat | 1871 | 92 |
| **optional** | | |
| Temperature sensor | 161 | 39 |

| Design | Order no. | PU |
|---|---|---|
| **Berker TS Sensor** | | |
| glass polar white | **7514 38 30** | 1 |
| glass black | **7514 38 35** | 1 |
| glass aluminium | **7514 30 34** | 1 |
| **Berker TS Sensor - configured** | | |
| glass polar white | **7514 39 30** | 1 |
| glass black | **7514 39 35** | 1 |
| glass aluminium | **7514 31 34** | 1 |



**Glass sensor 4gang comfort**

- integrated bus coupling unit



| | |
|---|---|
| Operating voltage | 21 ... 32 V= |
| Current consumption | 12.5 mA |
| Operating temperature | -5 ... +45 °C |
| Dimensions (W x H x D) | 86 x 160 x 5.7 mm |

Only suitable for KNX.

– with blue operation LED and 8 white status LEDs
– for additional products to complement the installation in matching colours/materials, refer to the Design platform S.1/B.x
– for glass frames in the same “style” for additional applications, see the Design line B.7

| Suitable for | Order no. | Page |
|---|---|---|
| Wall box 2gang flat | 1871 | 92 |
| **optional** | | |
| Temperature sensor | 161 | 39 |

| Design | Order no. | PU |
|---|---|---|
| **Berker TS Sensor** | | |
| glass polar white | **7514 48 30** | 1 |
| glass black | **7514 48 35** | 1 |
| glass aluminium | **7514 40 34** | 1 |
| **Berker TS Sensor - configured** | | |
| glass polar white | **7514 49 30** | 1 |
| glass black | **7514 49 35** | 1 |
| glass aluminium | **7514 41 34** | 1 |

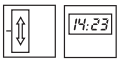
## Glass sensors with thermostat

- With integrated bus coupling unit
- Operation by gently touching the sensor surfaces on the white LEDs
- For switch, push-button, dimmer, blind and thermostat functions
- Single and two push-button operation parameterisable
- Retrieval, setting and storing of 8 light scenes
- One push-button operation for switching, buttons, blinds and dimming
- Extension unit for light scene push-button
- For heating and/or cooling mode with/without auxiliary step
- Controller operating modes: comfort, standby, night and frost/heat protection mode
- LED display with symbol display
- With 2 additional sensor surfaces for display control
- Display of operating mode, controller lockout, room and outside temperature as well as time in connection with a clock
- Integrated temperature sensor
- Temperature measurement via internal and/or external temperature sensor with mean value formation
- Additional connection for external temperature sensor
- Usable as thermostat extension unit
- Temperature control via local measurement or measured value via object
- Blocking function for sensor surface e.g. for cleaning the glass surface
- Value transmitter for dimming, position, brightness and temperature values 1 and 2 byte
- Separate auxiliary power supply needed
- Operation with non-choked output of KNX voltage supply possible (pay attention to current consumption)
- Bus connection via connecting terminal
- For vertical mounting
- For mounting, always use the flat 2gang wall box, order no. 1871
- With adapter ring for dismantling protection and shadow gap formation
- With disassembly suction tool
- For individually labelled glass and touch sensors (configured variations), the Web Configurator generates a layout number, which must be additionally specified when placing the order.
- Many options for labelling (text and/or icons) are available via the **web configurator** at http://ts-glas-sensor.berker.de




### Glass sensor 2gang with thermostat

- integrated bus coupling unit
- display




| | |
|---|---|
| Operating voltage | 21 ... 32 V= |
| Current consumption | 23 mA |
| Operating temperature | -5 ... +45 °C |
| Dimensions (W x H x D) | 86 x 160 x 5.7 mm |

Only suitable for KNX.

- with blue operation LED and 4 white status LEDs
- for additional products to complement the installation in matching colours/materials, refer to the Design platform S.1/B.x
- for glass frames in the same “style” for additional applications, see the Design line B.7

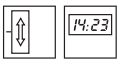
| Suitable for | Order no. | Page |
|---|---|---|
| Power supply 24 V DC RMD | TGA200 | 140 |
| Wall box 2gang flat | 1871 | 92 |
| **optional** | | |
| Temperature sensor | 161 | 39 |

| Design | Order no. | PU |
|---|---|---|
| **Berker TS Sensor** | | |
| glass polar white | **7564 20 30** | 1 |
| glass black | **7564 20 35** | 1 |
| glass aluminium | **7564 20 34** | 1 |
| **Berker TS Sensor - configured** | | |
| glass polar white | **7564 21 30** | 1 |
| glass black | **7564 21 35** | 1 |
| glass aluminium | **7564 21 34** | 1 |



**Glass sensor 3gang with thermostat**

- integrated bus coupling unit
- display



| | |
|---|---|
| Operating voltage | 21 ... 32 V= |
| Current consumption | 23 mA |
| Operating temperature | -5 ... +45 °C |
| Dimensions (W x H x D) | 86 x 160 x 5.7 mm |

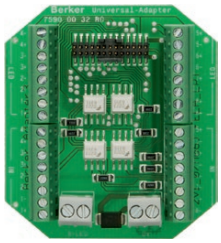
Only suitable for KNX.

– with blue operation LED and 6 white status LEDs
– for additional products to complement the installation in matching colours/materials, refer to the Design platform S.1/B.x
– for glass frames in the same “style” for additional applications, see the Design line B.7

| Suitable for | Order no. | Page |
|---|---|---|
| Wall box 2gang flat | 1871 | 92 |
| Power supply 24 V DC RMD | TGA200 | 140 |
| **optional** | | |
| Temperature sensor | 161 | 39 |

| Design | Order no. | PU |
|---|---|---|
| **Berker TS Sensor** | | |
| glass polar white | **7564 30 30** | 1 |
| glass black | **7564 30 35** | 1 |
| glass aluminium | **7564 30 34** | 1 |
| **Berker TS Sensor - configured** | | |
| glass polar white | **7564 31 30** | 1 |
| glass black | **7564 31 35** | 1 |
| glass aluminium | **7564 31 34** | 1 |

## Supplementary products



**Adapter for KNX and relay**

– for wiring with universal interfaces, radio push-button interfaces or relay

| Suitable for | Order no. | Page |
|---|---|---|
| Glass sensors | | 89 |

| Design | Order no. | PU |
|---|---|---|
| adapter for KNX and relay | **TYB708D** | 1 |

### Wall boxes



**Wall box 2gang flat**

| | |
|---|---|
| Dimensions (W x H x D) | 68 x 139 x 47.5 mm |
| Cut hole pitch | 71 mm |
| Cut hole Ø | 2 x 68 mm |

– flush wall-mounting or with adapter ring
– for flush mounting and hollow-wall mounting

| Suitable for | Order no. | Page |
|---|---|---|
| Glass sensors comfort | | 89 |
| Glass sensors with thermostat | | 91 |

| Design | Order no. | PU |
|---|---|---|
| wall box 2gang flat | **1871** | 1 |



**Wall box 2gang**

| | |
|---|---|
| Dimensions (W x H x D) | 68 x 139 x 75 mm |
| Cut hole pitch | 71 mm |
| Cut hole Ø | 2 x 68 mm |

– flush wall-mounting or with adapter ring
– for flush mounting and hollow-wall mounting

| Suitable for | Order no. | Page |
|---|---|---|
| Glass sensors | | 89 |

| Design | Order no. | PU |
|---|---|---|
| wall box 2gang | **1870** | 1 |

# Berker TS/TS Crystal

Behind its elegantly purist exterior, there is an unexpected wealth of technical options: the Berker TS allows operation, not only of multiple light sources, but, if so desired, also of intelligent building control systems. With their fine platform and switching knobs MADE WITH SWAROVSKI ELEMENTS, the Berker TS Crystal lends refinement to any atmosphere.



# 04

Page


| | |
|---|---|
| Cover plates | 96 |
| Supplementary products | 98 |

## Cover plates



### Glass cover plate

| | |
|---|---|
| Dimensions (W x H x D) | 86 x 160 x 5 mm |
| Screw length | 25 mm |

Other components from the B.7 glass range are available, e.g. socket outlets. Observe scale drawings!

- glass with polar white imprint on the backside
- with polar white plastic base
- each with 2 3.5 x 25 mm two-hole screws in chrome, gold and stainless steel for dismantling protection
- with screwdriver
- for vertical and horizontal mounting

| Suitable for | Order no. | Page |
|---|---|---|
| Berker TS Crystal | | 97 |
| Push-button, NO contact | 1811 1 .. | 96 |
| Wall box | 1809 | 98 |
| Wall box for installation in hollow walls | 1824 | 98 |
| **optional** | | |
| Two-hole screws 2 x M3.5 x 50 mm | 1895 1 .. | 98 |

| Design | Order no. | PU |
|---|---|---|
| clear glossy, 1gang | **1391** | 1 |
| clear glossy, 2gang | **1392** | 1 |
| clear glossy, 4gang | **1394** | 1 |



### Glass cover plate with facet

| | |
|---|---|
| Dimensions (W x H x D) | 86 x 160 x 5 mm |
| Screw length | 25 mm |

- with all-round facet
- with polar white plastic base
- each with 2 3.5 x 25 mm two-hole screws in chrome, gold and stainless steel for dismantling protection
- with screwdriver
- for vertical and horizontal mounting

| Suitable for | Order no. | Page |
|---|---|---|
| Berker TS Crystal | | 97 |
| Push-button, NO contact | 1811 1 .. | 96 |
| Wall box | 1809 | 98 |
| Wall box for installation in hollow walls | 1824 | 98 |
| **optional** | | |
| Two-hole screws 2 x M3.5 x 50 mm | 1895 1 .. | 98 |

| Design | Order no. | PU |
|---|---|---|
| clear glossy, 1gang | **1311** | 1 |
| clear glossy, 2gang | **1321** | 1 |
| clear glossy, 4gang | **1341** | 1 |
| clear glossy, 6gang | **1366** | 1 |
| clear glossy, 8gang | **1388** | 1 |



### Push-button, NO contact

| | |
|---|---|
| Rated voltage | 24 V |
| Momentary-contact current | 1.5 A |
| Operating temperature | -20 ... +60 °C |
| Insertion depth | 13 mm |

For connection via system interfaces to KNX radio or KNX installations.

Alternatively, can be used to control relay circuits.

Only suitable for safety low voltages!

- brass, refined
- with plug-in terminals

| Suitable for | Order no. | Page |
|---|---|---|
| **optional** | | |
| System interfaces | | 120 |

| Design | Order no. | PU |
|---|---|---|
| chrome glossy, brass galvanised | **1811 10** | 10 |
| gold glossy, 24-carat galvanised | **1811 12** | 10 |
| stainless steel matt, brushed nickel | **1811 13** | 10 |

## Berker TS Crystal



### Push-button Crystal

| | |
|---|---|
| Rated voltage | 24 V |
| Momentary-contact current | 1.5 A |
| Operating temperature | -20 ... +60 °C |
| Insertion depth | 13 mm |

– NO contact
– brass, refined
– with SWAROWSKI ELEMENTS
– with plug-in terminals

For connection via system interfaces to KNX radio or KNX installations.

Alternatively, can be used to control relay circuits.

Only suitable for safety low voltages!

| Suitable for optional | Order no. | Page |
|---|---|---|
| System interfaces | | 120 |



| Design | Order no. | PU |
|---|---|---|
| chrome glossy | **1964 00 01** | 1 |



### Push-button Black Diamond

| | |
|---|---|
| Rated voltage | 24 V |
| Momentary-contact current | 1.5 A |
| Operating temperature | -20 ... +60 °C |
| Insertion depth | 13 mm |

– NO contact
– brass, refined
– with SWAROWSKI ELEMENTS
– with plug-in terminals

For connection via system interfaces to KNX radio or KNX installations.

Alternatively, can be used to control relay circuits.

Only suitable for safety low voltages!

| Suitable for optional | Order no. | Page |
|---|---|---|
| System interfaces | | 120 |



| Design | Order no. | PU |
|---|---|---|
| stainless steel matt | **1966 02 15** | 1 |



### Push-button Siam

| | |
|---|---|
| Rated voltage | 24 V |
| Momentary-contact current | 1.5 A |
| Operating temperature | -20 ... +60 °C |
| Insertion depth | 13 mm |

– NO contact
– brass, refined
– with SWAROWSKI ELEMENTS
– with plug-in terminals

For connection via system interfaces to KNX radio or KNX installations.

Alternatively, can be used to control relay circuits.

Only suitable for safety low voltages!

| Suitable for optional | Order no. | Page |
|---|---|---|
| System interfaces | | 120 |



| Design | Order no. | PU |
|---|---|---|
| gold glossy | **1965 02 08** | 1 |



### Push-button Topaz

| | |
|---|---|
| Rated voltage | 24 V |
| Momentary-contact current | 1.5 A |
| Operating temperature | -20 ... +60 °C |
| Insertion depth | 13 mm |

– NO contact
– brass, refined
– with SWAROWSKI ELEMENTS
– with plug-in terminals

For connection via system interfaces to KNX radio or KNX installations.

Alternatively, can be used to control relay circuits.

Only suitable for safety low voltages!

| Suitable for optional | Order no. | Page |
|---|---|---|
| System interfaces | | 120 |



| Design | Order no. | PU |
|---|---|---|
| gold glossy | **1965 02 03** | 1 |

# Supplementary products

## Wall boxes



### Wall box

– plastic

| Suitable for | Order no. | Page |
|---|---|---|
| Glass cover plate | | 96 |
| Glass cover plate with facet | | 96 |

| Design | Order no. | PU |
|---|---|---|
| wall box | **1809** | 50 |
| wall box for installation in hollow walls | **1824** | 50 |



### Wall box 2gang

| | |
|---|---|
| Dimensions (W x H x D) | 68 x 139 x 75 mm |
| Cut hole Ø | 2 x 68 mm |
| Cut hole pitch | 71 mm |

– flush wall-mounting or with adapter ring
– for flush mounting and hollow-wall mounting

| Suitable for | Order no. | Page |
|---|---|---|
| Glass sensors | | 89 |

| Design | Order no. | PU |
|---|---|---|
| wall box 2gang | **1870** | 1 |

## Accessories



### Two-hole screws 2 x M3.5 x 50 mm

– brass, refined
– 2 pieces for fixing in deeper seated boxes

| Design | Order no. | PU |
|---|---|---|
| chrome glossy, brass galvanised | **1895 10** | 1 |
| gold glossy, 24-carat galvanised | **1895 12** | 1 |
| stainless steel matt, brushed nickel | **1895 13** | 1 |

# Berker R.1/R.3
# Touch Sensors

Just right for the switch programmes in the R.-Design is the Berker Touch Sensor – in a soft (R.1) and cornered (R.3) contour as well as in the glass surfaces black and polar white.
The KNX-Touch Sensor has the same assembly height as the switches in the R.-Design.
With its integrated bus coupling unit, a variety of building functions can be read and controlled through it.



# 05

Page


| | |
|---|---|
| Touch Sensors comfort | 102 |
| Touch Sensors with thermostat | 105 |

## Touch sensors comfort

- With integrated bus coupling unit
- Operation by gently touching the sensor surfaces on the white LEDs
- For switch, push-button, dimmer and shutter functions
- Single and two push-button operation configurable
- Retrieval, setting and storing of 8 light scenes
- One push-button operation for switching, buttons, blinds and dimming
- Extension unit for light scene push-button
- Temperature measurement via internal and/or external temperature sensor with mean value formation
- Additional connection for external temperature sensor
- Usable as thermostat extension unit
- Provision of the internal temperature value via communication object
- Blocking function for sensor surface e.g. for cleaning the glass surface
- Value transmitter for dimming, position, brightness and temperature values 1 and 2 byte
- Bus connection via connecting terminal
- For mounting on a double box, e.g. order no. 1809 (flush mounting) or 1824 (hollow wall mounting)
- For vertical mounting
- With dismantling protection via a screw on the fastening ring
- For individually labelled glass and touch sensors (configured variations), the new Web Configurator generates a layout number, which must be additionally specified when placing the order.
- Many options for labelling (text and/or icons) are available via the **web configurator** at http://ts-glas-sensor.berker.de



### Touch Sensor 1gang comfort

- integrated bus coupling unit



| | |
|---|---|
| Operating voltage | 21 ... 32 V= |
| Current consumption | 12.5 mA |
| Operating temperature | -5 ... +45 °C |
| Dimensions (W x H x D) | 81 x 152 x 10 mm |

- with blue operation LED and 2 white status LEDs
- for additional products to complement the installation in matching colours/materials, refer to the Design platform R.1/R.3
- for suitable frames in the same “style” for additional applications, see the Design line R.x

| Suitable for optional | Order no. | Page |
|---|---|---|
| Temperature sensor | 161 | 39 |
| Wall box | 1809 | 98 |
| Wall box for installation in hollow walls | 1824 | 98 |

| Design | Order no. | PU |
|---|---|---|
| **Berker R.1** | | |
| glass polar white | **7514 18 60** | 1 |
| glass black | **7514 18 65** | 1 |
| **Berker R.1 - configured** | | |
| glass polar white | **7514 11 60** | 1 |
| glass black | **7514 11 65** | 1 |
| **Berker R.3** | | |
| glass polar white | **7514 18 50** | 1 |
| glass black | **7514 18 55** | 1 |
| **Berker R.3 - configured** | | |
| glass polar white | **7514 11 50** | 1 |
| glass black | **7514 11 55** | 1 |





### Touch Sensor 2gang comfort

- integrated bus coupling unit



| | |
|---|---|
| Operating voltage | 21 ... 32 V= |
| Current consumption | 12.5 mA |
| Operating temperature | -5 ... +45 °C |
| Dimensions (W x H x D) | 81 x 152 x 10 mm |

– with blue operation LED and 4 white status LEDs
– for additional products to complement the installation in matching colours/materials, refer to the Design platform R.1/R.3
– for suitable frames in the same “style” for additional applications, see the Design line R.x

| Suitable for optional | Order no. | Page |
|---|---|---|
| Temperature sensor | 161 | 39 |
| Wall box | 1809 | 98 |
| Wall box for installation in hollow walls | 1824 | 98 |



| Design | Order no. | PU |
|---|---|---|
| **Berker R.1** | | |
| glass polar white | **7514 28 60** | 1 |
| glass black | **7514 28 65** | 1 |
| **Berker R.1 - configured** | | |
| glass polar white | **7514 21 60** | 1 |
| glass black | **7514 21 65** | 1 |
| **Berker R.3** | | |
| glass polar white | **7514 28 50** | 1 |
| glass black | **7514 28 55** | 1 |
| **Berker R.3 - configured** | | |
| glass polar white | **7514 21 50** | 1 |
| glass black | **7514 21 55** | 1 |



### Touch Sensor 3gang comfort

- integrated bus coupling unit



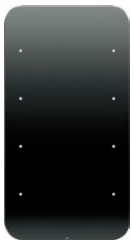
| | |
|---|---|
| Operating voltage | 21 ... 32 V= |
| Current consumption | 12.5 mA |
| Operating temperature | -5 ... +45 °C |
| Dimensions (W x H x D) | 81 x 152 x 10 mm |

– with blue operation LED and 6 white status LEDs
– for additional products to complement the installation in matching colours/materials, refer to the Design platform R.1/R.3
– for suitable frames in the same “style” for additional applications, see the Design line R.x

| Suitable for optional | Order no. | Page |
|---|---|---|
| Temperature sensor | 161 | 39 |
| Wall box | 1809 | 98 |
| Wall box for installation in hollow walls | 1824 | 98 |



| Design | Order no. | PU |
|---|---|---|
| **Berker R.1** | | |
| glass polar white | **7514 38 60** | 1 |
| glass black | **7514 38 65** | 1 |
| **Berker R.1 - configured** | | |
| glass polar white | **7514 31 60** | 1 |
| glass black | **7514 31 65** | 1 |
| **Berker R.3** | | |
| glass polar white | **7514 38 50** | 1 |
| glass black | **7514 38 55** | 1 |
| **Berker R.3 - configured** | | |
| glass polar white | **7514 31 50** | 1 |
| glass black | **7514 31 55** | 1 |



**Touch Sensor 4gang comfort**

- integrated bus coupling unit



| | |
|---|---|
| Operating voltage | 21 ... 32 V= |
| Current consumption | 12.5 mA |
| Operating temperature | -5 ... +45 °C |
| Dimensions (W x H x D) | 81 x 152 x 10 mm |

– with blue operation LED and 8 white status LEDs
– for additional products to complement the installation in matching colours/materials, refer to the Design platform R.1/R.3
– for suitable frames in the same “style” for additional applications, see the Design line R.x

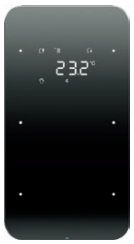
| Suitable for optional | Order no. | Page |
|---|---|---|
| Temperature sensor | 161 | 39 |
| Wall box | 1809 | 98 |
| Wall box for installation in hollow walls | 1824 | 98 |



| Design | Order no. | PU |
|---|---|---|
| **Berker R.1** | | |
| glass polar white | **7514 48 60** | 1 |
| glass black | **7514 48 65** | 1 |
| **Berker R.1 - configured** | | |
| glass polar white | **7514 41 60** | 1 |
| glass black | **7514 41 65** | 1 |
| **Berker R.3** | | |
| glass polar white | **7514 48 50** | 1 |
| glass black | **7514 48 55** | 1 |
| **Berker R.3 - configured** | | |
| glass polar white | **7514 41 50** | 1 |
| glass black | **7514 41 55** | 1 |

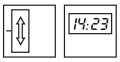
## Touch Sensors with thermostat

- With integrated bus coupling unit
- Operation by gently touching the sensor surfaces on the white LEDs
- For switch, push-button, dimmer, blind and thermostat functions
- Single and two push-button operation configurable
- One push-button operation for switching, buttons, blinds and dimming
- For individual single room temperature control
- For heating and/or cooling mode with/without auxiliary step
- Operating modes: comfort, standby, night operation and frost/heat protection adjustable
- LED display with symbol display
- With 2 additional sensor surfaces for display control
- Display of operating mode, controller lockout, room and outside temperature as well as time in connection with a clock
- Integrated temperature sensor
- Temperature measurement via internal and/or external temperature sensor with mean value formation
- Additional connection for external temperature sensor
- Provision of the internal temperature value via communication object
- Temperature control via local measurement or measured value via object
- Value transmitter for dimming, position, brightness and temperature values 1 and 2 byte
- Separate auxiliary power supply needed
- Operation with non-choked output of KNX voltage supply possible (pay attention to current consumption)
- Bus connection via connecting terminal
- For mounting on a double box, e.g. order no. 1809 (flush mounting) or 1824 (hollow wall mounting)
- For vertical mounting
- With dismantling protection via a screw on the fastening ring
- For individually labelled glass and touch sensors (configured variations), the Web Configurator generates a layout number, which must be additionally specified when placing the order.
- Many options for labelling (text and/or icons) are available via the **web configurator** at http://ts-glas-sensor.berker.de



**Touch Sensor 2gang with thermostat**

- integrated bus coupling unit
- display



| | |
|---|---|
| Operating voltage | 21 ... 32 V= |
| Current consumption | 23 mA |
| Operating temperature | -5 ... +45 °C |
| Dimensions (W x H x D) | 81 x 152 x 10 mm |

Only suitable for KNX.

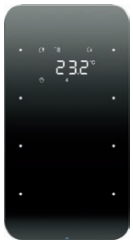
- with blue operation LED and 4 white status LEDs
- for additional products to complement the installation in matching colours/materials, refer to the Design platform R.1/R.3
- for suitable frames in the same “style” for additional applications, see the Design line R.x

| Suitable for | Order no. | Page |
|---|---|---|
| Power supply 24 V DC RMD | TGA200 | 140 |
| **optional** | | |
| Temperature sensor | 161 | 39 |
| Wall box | 1809 | 98 |
| Wall box for installation in hollow walls | 1824 | 98 |

| Design | Order no. | PU |
|---|---|---|
| **Berker R.1** | | |
| glass polar white | **7564 20 60** | 1 |
| glass black | **7564 20 65** | 1 |
| **Berker R.1 - configured** | | |
| glass polar white | **7564 21 60** | 1 |
| glass black | **7564 21 65** | 1 |
| **Berker R.3** | | |
| glass polar white | **7564 20 50** | 1 |
| glass black | **7564 20 55** | 1 |

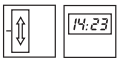


| | | |
|---|---|---|
| **Berker R.3 - configured** | | |
| glass polar white | **7564 21 50** | 1 |
| glass black | **7564 21 55** | 1 |



**Touch Sensor 3gang with thermostat**

- integrated bus coupling unit
- display



| | |
|---|---|
| Operating voltage | 21 ... 32 V= |
| Current consumption | 23 mA |
| Operating temperature | -5 ... +45 °C |
| Dimensions (W x H x D) | 81 x 152 x 10 mm |

Only suitable for KNX.

– with blue operation LED and 6 white status LEDs
– for additional products to complement the installation in matching colours/materials, refer to the Design platform R.1/R.3
– for suitable frames in the same “style” for additional applications, see the Design line R.x

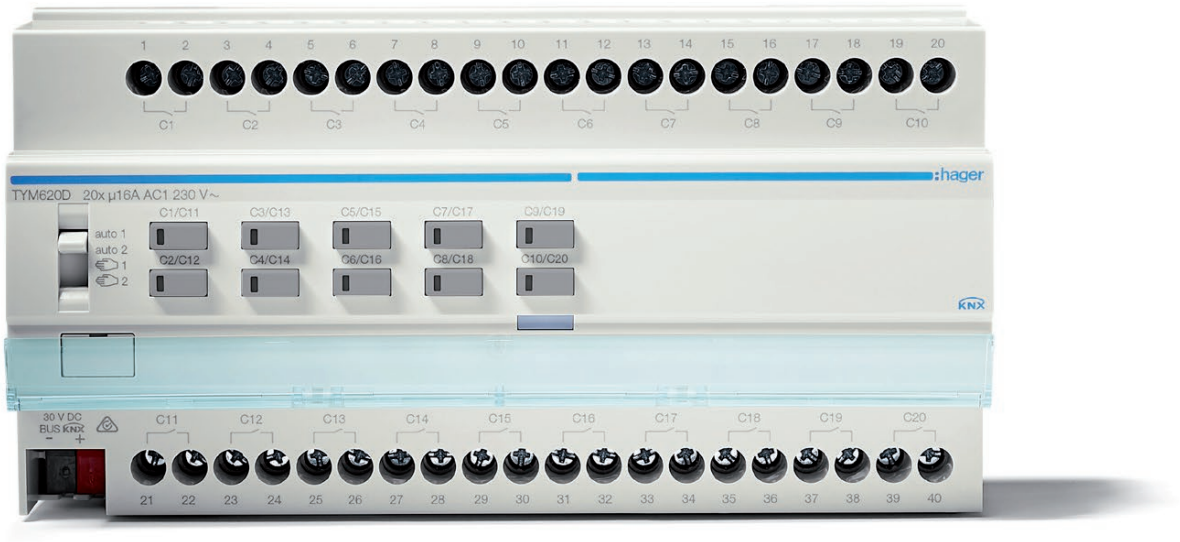
| Suitable for | Order no. | Page |
|---|---|---|
| Power supply 24 V DC RMD | TGA200 | 140 |
| **optional** | | |
| Temperature sensor | 161 | 39 |
| Wall box | 1809 | 98 |
| Wall box for installation in hollow walls | 1824 | 98 |



| Design | Order no. | PU |
|---|---|---|
| **Berker R.1** | | |
| glass polar white | **7564 30 60** | 1 |
| glass black | **7564 30 65** | 1 |
| **Berker R.1 - configured** | | |
| glass polar white | **7564 31 60** | 1 |
| glass black | **7564 31 65** | 1 |
| **Berker R.3** | | |
| glass polar white | **7564 30 50** | 1 |
| glass black | **7564 30 55** | 1 |
| **Berker R.3 - configured** | | |
| glass polar white | **7564 31 50** | 1 |
| glass black | **7564 31 55** | 1 |

# KNX inputs, outputs and system components

With KNX, a building provides a significant contribution to looking after itself: motion detectors activate lighting as necessary. Windows and doors left open by accident are signalled using magnetic contacts and can be closed automatically. In addition, when the windows are open, the heating/cooling system reduces output. Using the KNX bus system, your house can learn to adapt to changed environmental conditions.



# 06

Page


| | |
|---|---|
| Presence detectors | 110 |
| Light sensitive switches | 115 |
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| Input / output modules | 120 |
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| Actuators flush mounted / surface-mounted | 137 |
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| Power supplies | 139 |
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## Presence detectors



### KNX 2-channel presence detector

| | |
|---|---|
| Supply voltage | Bus 30 V |
| Power consumption | 12 mA |
| Lighting time delay via potentiometer | 1 to 30 min |
| Presence time delay via potentiometer | 30 s to 60 min |
| Brightness threshold | 5 to 1200 lux |
| Recommended installation distance from ground | 2.5 m to 3.5 m |
| Operating temperature | 0°C to 45°C |

- TX510 devices are 2-channel presence detectors capable of detecting low amplitude movements (e.g. person working in an office).
- 2 control channels via KNX bus.
- Time delay adjustment for brightness and presence controls via product potentiometers or via ETS.
- Brightness threshold adjustment via product potentiometer or via ETS.
- Detection is by means of 2 pyroelectric sensors located under detection lenses.
- Brightness sensor measures room brightness on a continuous basis, matching it against the brightness threshold set by potentiometer.
- The head of the detector is directional at 90° and can be used to adjust the detection area according to the room configuration.
- Application software allows configuring the 2 channel presence detector 360° TX510.
- The TX510 2-channel presence detector is sensitive to infrared rays associated with heat emitted by moving bodies. Lighting, roller shutter / blind, heating, priority and scene commands can be sent during movement detection, depending on the ambient brightness.
- The lighting channel controls a load in case of presence detection, when the ambient brightness is below an adjustable threshold.
- The presence channel controls a load in case of presence detection, without taking account of the ambient brightness.
- The ambient brightness threshold can be defined by parameterizing or on the device via a potentiometer.
- Lighting and presence delay function sends a command at the end of a delay when no presence has been detected during the delay ("absence" of persons). The delay value can be set by ETS or on the device via a potentiometer.
- Brightness probe locking (Lighting channel) function inhibits the brightness measurement of certain detectors when they control the same output.
- This function authorizes or forbids presence detection by the lighting channel (by a clock, for example, at certain periods). The presence channel continues operating independently.
- The operating mode (Automatic or Semi-automatic) is selected by ETS or via a switch directly on the device.
- Master/Slave function extends the motion detector's detection area by associating it with several other detectors.
- The Scene Execution function sends group commands to different kinds of outputs to create ambiences or scenarios (presence scenario, absence scenario ...)

| Suitable for | Order no. | Page |
|---|---|---|
| **Optional** | | |
| Mounting accessory | EE813 | 111 |

| Design | Order no. | PU |
|---|---|---|
| white | **TX510** | 1 |



## KNX presence detector with light regulation

| | |
|---|---|
| Supply voltage | 29 V DC |
| Power consumption | 12 mA |
| Lighting output operation time | 1 to 30 min |
| Brightness threshold | 5 to 1200 lux |
| Minimum adjustment range | 0% to 50% |
| Presence level adjustment | mini to 100% |
| Recommended installation distance from ground | 2.5 m to 3.5 m |
| Operating temperature | 0°C to 45°C |

- TX511 devices, in association with KNX dimmers, offer lighting control functions.
- 1 regulation channel via KNX bus.
- Brightness threshold, lighting time delay and minimum dimming level adjustment via product potentiometer or via ETS.
- They are designed to detect low amplitude movements (e.g. person working in an office).
- Detection is by means of 2 pyroelectric sensors located under detection lenses.
- A brightness sensor measures room brightness on a continuous basis, matching it against the brightness threshold set by potentiometer.
- The head of the detector is directional at 90° and can be used to adjust the detection area according to the room configuration.
- Application software allows configuring the 1-channel 360° presence detector lignt regulator TX511.
- The TX511 1-channel presence detector with light regulation is sensitive to infrared rays associated with heat emitted by moving bodies. It thus detects the presence or absence of persons in a room.
- Lighting level regulation can be active or inactive.
- When regulation is active, the regulation set points can be defined in Lux either via the potentiometer on the device or by ETS.
- When regulation is inactive, the dimming levels can be defined in %either via the potentiometer on the device or by ETS.
- Set point modification via push button function modifies the regulation set point or the dimming level in the presence of persons via a communicating push button. The new value is then stored.
- Lighting delay function starts a delay at each presence detection; it extends the presence period accordingly.
- Priority function allows overriding a regulation set point (active regulation) or a dimming level (inactive regulation).
- Authorization ON or OFF function authorizes or inhibits presence detection (by a clock, for example, at certain periods).
- The operating mode (Automatic or Semi-automatic) is selected by ETS or via a switch directly on the device.
- The Scene function allows defining, for a given scene number, regulation setpoints or lighting levels to create ambiences or scenarios (presence scenario, absence scenario ...)

| Suitable for | Order no. | Page |
|---|---|---|
| **Optional** | | |
| Mounting accessory | EE813 | 111 |

| Design | Order no. | PU |
|---|---|---|
| white | **TXC511** | 1 |



## Mounting accessory

| | |
|---|---|
| Dimensions | Ø70 x 45 mm |

| Suitable for | Order no. | Page |
|---|---|---|
| KNX 2-channel presence detector | TX510 | 110 |
| KNX presence detector with light regulation | TXC511 | 111 |

| Design | Order no. | PU |
|---|---|---|
| white | **EE813** | 1 |



**KNX presence detector 360° monobloc**

| | |
|---|---|
| Supply voltage | KNX bus 30 V DC |
| Busline consumption | 12 mA |
| Lighting output operating time | 1 min to 1 hr |
| Brightness level | 5 to 1000 lux |
| Recommended installation distance from ground | 2.5 m to 3.5 m |
| Detection range | Ø 7 m (installed product height: 2.5 m) |
| Hole size required | 60 mm (flush mounted) |
| Operating temperature | 0°C to 45°C |

- Occupancy sensors TCC520E are presence detectors designed to detect low amplitude movements (e.g. person sitting at a desk).
- Detection is by means of a pyro-electric sensor located under detection lens.
- The occupancy sensor measures the brightness in the room on a continuous basis and compares it to the level preset on the potentiometer or ETS parameter.
- One direct lighting control channel (relay output of the product).
- One lighting control channel on the KNX bus.
- Control of presence/ absence mode.
- Time and brightness adjustment via ETS or remote control EE807.
- Area linking: the occupancy sensor in a room can switch the light on in the corridor beside or the opposite.
- In addition to the local load, the detector can also activate an actuator connected to the bus when presence is detected and brightness level is below a defined threshold.
- The brightness threshold can be defined by ETS or directly on the device via a potentiometer or by means of the installer remote control EE807.
- The lighting time delay defines the activation duration of the lighting channel in case of occupancy. This delay may be reduced when there is enough ambient light. It can be set locally via potentiometer, remote control ETS, EE807.
- The Lighting channel and local load can also be switched on via the remote control ETS or via a EE808 push button.
- Authorization ON or OFF (Lighting channel) function authorizes or forbids presence detection by the lighting channel (by a clock, for example, at certain periods).
- The operating mode (Automatic or Semi-automatic) is selected by parameterizing or via a switch directly on the device.
- This function extends the presence detector‘s detection area by associating several other detectors.
- The local load can be controlled by the presence detector or directly via communication objects;

| Suitable for<br>Optional | Order no. | Page |
|---|---|---|
| IR configuration hand-held transmitter for presence detector | EE807 | 115 |
| IR hand-held transmitter for presence detector | EE808 | 114 |
| Mounting accessory | EEK005 | 114 |

| Design | Order no. | PU |
|---|---|---|
| white | **TCC520E** | 1 |



**KNX presence detector with regulation DALI/DSI**

| | |
|---|---|
| Supply voltage | KNX bus 30 V DC |
| Busline consumption | 12 mA |
| Lighting output operating time | 1 min to 1 hr |
| Brightness level | 5 to 1000 lux |
| Recommended installation distance from ground | 2.5 m to 3.5 m |
| Detection range | Ø 7 m (installed product height: 2.5 m) |
| Hole size required | 60 mm (flush mounted) |
| Operating temperature | -10°C to 45°C |

- Presence detector with regulation DALI/DSI Occupancy sensors TCC521E are presence detectors designed to detect low amplitude movements (e.g. person sitting at a desk).
- Detection is by means of a pyro-electric sensor located under detection lens.
- The occupancy sensor measures the brightness in the room on a continuous basis and compares it to the level preset on the potentiometer (or by means of the remote control EE807 or ETS parameter).
- One lighting control channel on the KNX bus.
- Control of presence/ absence mode.
- Time and brightness adjustment via ETS or remote control EE807.
- Area linking: the occupancy sensor in a room can switch the light on in the corridor beside or the opposite.
- Application software allows configuring the light regulator -channel of TCC521E.
- The TCC521E presence detector for light regulation embeds a DALI/DSI interface that will be used to control directly DALI/DSI ballasts.
- It can also control KNX dimmers and KNX/DALI gateways (TX216) to fulfill the light regulation functionality.
- The lighting regulation process is activated according the presence and absence.
- When regulation is active, the detector regulates the lighting level in the room according to a set-point value in Lux in the presence of persons and according to another set-point value in the absence of persons.
- When regulation is inactive, the detector sets the dimming level of the dimmer outputs to a configurable set % value in the presence of persons and to another configurable set value in the absence of persons.
- Time delay (Lighting and regulation functions) function starts a delay at each presence detection; it extends the presence period accordingly.
- Authorization ON or OFF (Lighting and regulation functions) function authorizes or inhibits presence detection (by a clock, for example, at certain periods).
- The operating mode (Automatic or Semiautomatic) is selected by parameterizing or via a switch directly on the device.
- The Scene function allows defining, for a given scene number, regulation set-points or lighting levels to create ambiences or scenarios (presence scenario, absence scenario).
- Remote control via infra red control EE808.
- Setup with the installer remote control EE807.
- Linking Master / Slave function extends the motion detector‘s detection area by associating several other detectors.
- In addition to the lighting regulation channel, the detector can also activate an actuator connected to the bus, when presence and brightness level is below a defined threshold.

| Suitable for | Order no. | Page |
|---|---|---|
| **Optional** | | |
| IR configuration hand-held transmitter for presence detector | EE807 | 115 |
| IR hand-held transmitter for presence detector | EE808 | 114 |
| Mounting accessory | EEK005 | 114 |

| Design | Order no. | PU |
|---|---|---|
| white | **TCC521E** | 1 |



### KNX presence detector monobloc without relay

| | |
|---|---|
| Supply voltage | KNX bus 30 V DC |
| Busline consumption | 10 mA |
| Lighting output operating time | 1 min to 1 hr |
| Brightness level | 5 to 1000 lux |
| Recommended installation distance from ground | 2.5 m to 3.5 m |
| Detection range | Ø 7 m (installed product height: 2.5 m) |
| Hole size required | 60 to 63 mm (flush mounted) |
| Operating temperature | -10°C to 45°C |

- High performance detectors to be used in premises or in passage areas, where they increase comfort and reduce drastically energy costs.
- KNX commissioning via ETS or TX100

| Suitable for | Order no. | Page |
|---|---|---|
| **Optional** | | |
| IR configuration hand-held transmitter for presence detector | EE807 | 115 |
| IR hand-held transmitter for presence detector | EE808 | 114 |
| Mounting accessory | EEK005 | 114 |

| Design | Order no. | PU |
|---|---|---|
| white | **TCC510S** | 1 |



### KNX presence detector monobloc multi-channel

| | |
|---|---|
| Supply voltage | KNX bus 30 V DC |
| Busline consumption | 315 mA |
| Lighting output operating time | 1 min to 1 hr |
| Brightness level | 5 to 1000 lux |
| Recommended installation distance from ground | 2.5 m to 3.5 m |
| Detection range | Ø 7 m (installed product height: 2.5 m) |
| Hole size required | 60 to 63 mm (flush mounted) |
| Operating temperature | -10°C to 45°C |

- High performance detectors to be used in premises or in passage areas, where they increase comfort and reduce drastically energy costs.
- KNX commissioning via ETS.

| Suitable for | Order no. | Page |
|---|---|---|
| **Optional** | | |
| IR configuration hand-held transmitter for presence detector | EE807 | 115 |
| IR hand-held transmitter for presence detector | EE808 | 114 |
| Mounting accessory | EEK005 | 114 |

| Design | Order no. | PU |
|---|---|---|
| white | **TCC530E** | 1 |



### Mounting accessory

| Suitable for | Order no. | Page |
|---|---|---|
| KNX presence detector monobloc w/o relay | TCC510S | 114 |
| KNX presence detector monobloc multi-channel | TCC530E | 114 |

| Design | Order no. | PU |
|---|---|---|
| white | **EEK005** | 1 |



### IR hand-held transmitter for presence detector

| | |
|---|---|
| Dimensions (L x W x H) | 120 x 70 x 10 mm |
| Battery service life | ≈ 3.5 years |

Scope of functions dependent on the controlled presence detector.

Required battery (CR 2032) is included in the scope of delivery.

For control for the lighting connected to the presence detector.

IP30



- RC6 code
- additional acknowledgement LED for displaying the IR transmission
- with 4 function buttons (calling up/saving light scene)
- with green “on” and red “off” button (on/off, dimmer function)

| Suitable for | Order no. | Page |
|---|---|---|
| KNX presence detector 360° monobloc | TCC520E | 112 |
| KNX presence detector with regulation DALI/DSI | TCC521E | 113 |
| KNX presence detector monobloc without relay | TCC510S | 114 |
| KNX presence detector monobloc multi-channel | TCC530E | 114 |

| Design | Order no. | PU |
|---|---|---|
| black matt | **EE808** | 1 |



IP30

**IR configuration hand-held transmitter for presence detector**

| | |
|---|---|
| Dimensions (L x W x H) | 111 x 63 x 10 mm |
| Battery service life | ≈ 3.5 years |

Required battery (CR 2032) is included in the scope of delivery.

For convenient configuration of supported presence detectors.

- RC6 code
- additional acknowledgement LED for displaying the IR transmission
- 15 buttons with integrated status-LED
- 3 configuration ranges for control, switch-off delay, brightness threshold
- setting of the brightness threshold manually, by default values or teach-in mode
- default settings can be selected for the brightness threshold daylight, office, corridor
- 2 configuration memories for identical configuration of several presence detectors

| Suitable for | Order no. | Page |
|---|---|---|
| KNX presence detector 360° monobloc | TCC520E | 112 |
| KNX presence detector with regulation DALI/DSI | TCC521E | 113 |
| KNX presence detector monobloc without relay | TCC510S | 114 |
| KNX presence detector monobloc multi-channel | TCC530E | 114 |



| Design | Order no. | PU |
|---|---|---|
| black matt | **EE807** | 1 |

## Light sensitive switch



**Light sensitive switch**

| | |
|---|---|
| Supply voltage | Bus 29 V |
| Maximum connection distance of probe | 100 m |
| Operating range | 2 to 200 lux<br>200 to 20000 lux |
| Operating temperature | 0°C to 45°C |
| Size | 2 modules |

This product is mainly intended for automatic control of inside/outside lighting circuits (ON/OFF and dimming controls) and blinds or rolling shutters according to ambient lighting level.

Associated with an external probe, this lightsensitive switch measures natural lighting and controls circuits according to a preset threshold range of 2 to 20000 lux.

Several light sensitive switches may be chained to increase the number of channels. In this case, only one probe is connected to one of the light sensitive switches.

| Suitable for | Order no. | Page |
|---|---|---|
| Cell for flush mounting | EE002 | 115 |
| Cell for wall mounting | EE003 | 115 |

| Design | Order no. | PU |
|---|---|---|
| without cell | **TXA025** | 1 |
| with cell | **TXA026** | 1 |



**Cell for flush mounting**

| | |
|---|---|
| Dimensions | 89 x 48 x 32 mm |
| Connection | flexible 2 x 0.75 mm² / 1m |
| IP | 54 |
| Operating temperature | -30°C to 60°C |

- Delivered with 1 m cable

| Suitable for | Order no. | Page |
|---|---|---|
| Light sensitive switch without cell | TXA025 | 115 |
| Light sensitive switch with cell | TXA026 | 115 |

| Design | Order no. | PU |
|---|---|---|
| cell for flush mounting | **EE002** | 1 |



**Cell for wall mounting**

| | |
|---|---|
| Dimensions | 25 x 25 x 20 mm |
| Connection | fixed 1 to 4 mm² |
| IP | 54 |
| Operating temperature | -30°C to 60°C |

| Suitable for | Order no. | Page |
|---|---|---|
| Light sensitive switch without cell | TXA025 | 115 |
| Light sensitive switch with cell | TXA026 | 115 |

| Design | Order no. | PU |
|---|---|---|
| cell for wall mounting | **EE003** | 1 |

## Physical sensors

### KNX weather station



**Weather station with GPS surface-mounted**

| | |
|---|---|
| Operating voltage over bus | 21 ... 32 V= |
| Auxiliary voltage | 24 V~/= |
| Rated current (heating incl.) | 81 mA |
| Brightness measuring range | 0 ... 150000 lx |
| Temperature measuring range, linear | - 30 ... + 80 °C |
| Measuring range, wind speed | 0 ... 35 m/s |
| Precipitation (Yes/No) | 1 bit |
| Operating temperature | - 30 ... + 50 °C |
| Dimensions (W x H x D) | 96 x 77 x 118 mm |
| Weight | ≈ 170 g |

For detection of wind, precipitation, temperature and brightness as well to process the signals.

Ensure correct orientation and free-standing installation.

- with wind, precipitation, twilight, temperature and brightness sensor
- with automatic summer/winter time change-over
- with heater element for winter operation
- with red programming LED
- for control of shading systems for up to 4 facades
- easy commissioning by means of predefined parameters
- predefined parameters when activating heat protection function or heat recovery function
- periodical emission for outside temperature, frost alarm, brightness, day/night mode, wind alarms and rain alarm predefined
- three preset limit values for wind alarm
- bus connection via connecting terminal
- with plug-in terminals for power supply
- for wall and mast assembly
- with pipe clamp for mast fixing

| Suitable for optional | Order no. | Page |
|---|---|---|
| KNX power supply 2 x 320 mA + 24 V DC, 640 mA RMD | TXA114 | 139 |
| Electrical power supply 24 V DC RMD | TGA200 | 140 |

| Design | Order no. | PU |
|---|---|---|
| white transparent | **TXE530** | 1 |



**KNX weather station**

| | |
|---|---|
| Supply voltage | 12-40 V DC<br>12-28 V AC |
| Consumption | max. 81 mA 24 V DC<br>10 % residual ripple |
| IP | 44 |
| Operating temperature | -30 °C to 50°C |
| Dimensions | 96 x 77 x 118 mm |

The weather station GPS-KNX TG053A measures the outdoor temperature, the wind speed and light. It detects rain and daylight fall.

The weather station gets date/time and site location data from GPS signals. It calculates also the exact position of the sun (Azimuth and Altitude) based on site coordinates and date/time data. This information (brightness level and sun position) is used to control blinds with slats based on sun tracking for up to 6 building frontages.

TG053A compact case houses all sensors, electronic data processing gear, GPS antenna and KNX bus connection.

The values measured are sent to the KNX bus as physical values (2x8 bits ou 1 bit). Each output has communication objects indicating the measured and calculated values. The state of outputs depends on one or more levels. Thresholds can be defined by settings or the communication objects.

The weather station TG053A includes an annual clock and a weekly clock. The clock channels can switch the outputs using the communication objects. The weekly clock controls up to four different time settings for each day of the week. The annual clock can be used to define up to three periods in the year with two daily ON/OFF commands for each of them. The switching times can be defined by settings or the communication objects.

The weather station also has 8 logical AND gates and 8 logical OR gates, each with four inputs. All control events, time programs, and the 8 logical inputs (such as communication objects) can be used as inputs of logical gates. The output of each gate can be configured in 1-bit or 2 x 8-bit format.

ETS software performs KNX configuration.

| Suitable for | Order no. | Page |
|---|---|---|
| Support for TG053 weather station, big | TG353 | 117 |
| Analogue input 4gang RMD | ST312 | 140 |
| Power supply 1x30V, 320 mA + 1x24V, 640 mA RMD | TXA114 | 139 |
| Electrical power supply 24 V DC RMD | TGA200 | 140 |

| Design | Order no. | PU |
|---|---|---|
| white | **TG053A** | 1 |



### Support for TG053 weather station

| Suitable for | Order no. | Page |
|---|---|---|
| KNX weather station | TG053A | 116 |
| Weather station with GPS surface-mounted | TXE530 | 116 |

| Design | Order no. | PU |
|---|---|---|
| big (75 x 60 x 360 mm) | **TG353** | 1 |
| small (45 x 53 x 60 mm) | **TG354** | |



### Power supply for TG053 weather station

| | |
|---|---|
| Supply voltage | 230 V 160 mA max<br>24 V DC TBTS 0.25 A max |
| IP | 54 |
| Operating temperature | -25 °C to 50°C |
| Dimensions | 50 x 50 x 24 mm |

| Design | Order no. | PU |
|---|---|---|
| black | **TP110** | 1 |

## Analogue inputs



### Analogue input 4gang RMD

| | |
|---|---|
| Frequency | 50/60 Hz |
| Operating voltage over bus | 21 ... 32 V= |
| Auxiliary voltage | 24 V~ |
| Voltage, inputs | 0-1; 0-10 V |
| Input impedence, voltage | 18 kΩ |
| Sensor output voltage | 24 V= |
| Sensor output current | max. 100 mA |
| Current consumption | 170 mA |
| Inputs, current | 0-20; 4-20 mA |
| Input impedence, current | 100 Ω |
| Limit values | per channel 2 |
| Operating temperature | -5 ... +45 °C |
| Assembling height as from DIN rail | 63 mm |
| Dimensions (W x H x D) | 72 x 90 x 70 mm |
| Width of rail mounted device (RMD) | 4 TE |

- with green/red status LED (operation/fault)
- with programming button and red programming LED
- for active sensors
- for wind, precipitation, brightness, temperature, twilight as well as humidity and temperature sensor, surface-mounted
- extendable with an analogue input module 4gang
- bus connection via connecting terminal
- inputs configurable can be set individually
- input 4-20 mA will be controlled for wire break
- cyclic transmission or transmission at absolute input modification settable
- with screw terminals
- with system interface for analogue input module

The analogue input is for the registration and treatment of independent analogue sensor signals. Depending on the input signal, limiting value messages can be transmitted via KNX.

Input signals to according to DIN IEC 381-1, -2

| Suitable for | Order no. | Page |
|---|---|---|
| Electrical power supply 24 V DC RMD | TGA200 | 140 |
| **Optional** | | |
| Safety transformer | ST312 | 140 |

| Design | Order no. | PU |
|---|---|---|
| light grey | **TYF784** | 1 |

## Wind gauge



### Wind gauge

| | |
|---|---|
| Supply voltage | 230 V AC 50 Hz |
| contact loading capacity | 230 V AC 4 A |
| IP | 65 |
| Operating temperature | -25 °C to 50°C |
| Dimensions of the enclosure | 80 x 100 x 52 mm |

- Adjustment of wind's speed limit : up to 55 km/h (range ex-works 25 km/h)
- Reaction time when exceeding this limit : 3 seconds (5 seconds max.)
- Close time at wind : 10 minutes (fixed)

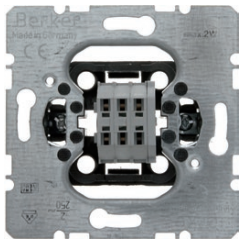
In the system tebis, the wind gauge TG050 is used as a protection device for solar shading equipment against strong wind. The speed of the wind is measured by the wind gauge.

If the wind's speed exceeds the value adjusted on the potentiometer for longer than three seconds, the solar shading equipment is retracted and kept in security position for 10 minutes.

After this delay, if the wind speed has decreased, the solar shading equipment can again be controlled by switches.

| Design | Order no. | PU |
|---|---|---|
| wind gauge and connection enclosure IP65 | **TG050** | 1 |

## Sensor insert



### Sensor insert

- e.g. for temperature sensor PT100
- with plug-in terminals
- without spreader claws

| Design | Order no. | PU |
|---|---|---|
| Sensor insert | **7594 10 01** | 10 |



### Central plate for sensor insert

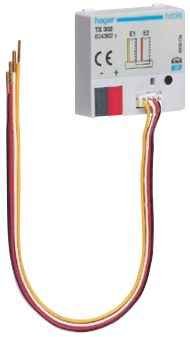
Caution!
Use only with intermediate ring for central plate from the corresponding range.
Labelling field cannot be used.

- e.g. for temperature sensor PT100
- with slots for air circulation

| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7, Q.1/Q.3, K.1/K.5** | | |
| white glossy | **7594 04 02** | 1 |
| polar white glossy | **7594 04 09** | 1 |
| polar white matt/velvety | **7594 04 89** | 1 |
| anthracite matt | **7594 04 85** | 1 |
| aluminium matt, lacquered | **7594 04 83** | 1 |
| light bronze matt, lacquered | **7594 04 04** | 1 |
| stainless steel matt, lacquered | **7594 04 03** | 1 |

## Input modules

- Power supply by Bus.
- The modules are installed in a 60 mm dia. Flush mounting box in association with a push button or a switch.
- Application software is used to configure the individual inputs.
- The sensors associated to the inputs (push buttons, switches, automatic controls) are used to control lighting, shutters, blinds.
- The Toggle Switch function changes the status of the controlled output whenever it is operated.
- This function is used for switching lighting, blind or heating circuits ON or OFF. The command may come from switches, push buttons or automatic controls.
- This function is used to control lighting circuits using one or two buttons
- The ON / OFF function transmits the ON / OFF object (short key-press).
- The Dimming function transmits the Dimming object (long key-press).
- This function controls a shutter or a blind using one or two push buttons.
- The Up / Down function transmits the Up / Down object (long key-press).
- The Stop / Angle function transmits the Stop / Angle object (short key-press).
- The Alarm 1 and Alarm 2 functions allow alarms coming from automatic controls to be periodically emitted (anemometer, rain detector, light sensitive switch, etc.)
- The Heating mode function is used to select a heating or air conditioning set point (Comfort, Eco, Frost protection, Absence). The command may come from switches, push buttons or automatic controls.
- The Value function (2 byte) is used for sending: Percentage %, Temperature °C, Luminosity level Lux, Brightness value % and Value 0-65535.
- The Scene function is used to select and storing scenes.
- The Timer function is used to switch ON or OFF a lighting circuit, shutters, heating for an adjustable time.
- The Priority function allows an input to be forced to a defined status.
- The Two Channel mode function allows controlling, with the same push button, two independent circuits having different functions.
- The Jamming function is used to lock an input via an object on the bus.
- With programming button and red programming LED.

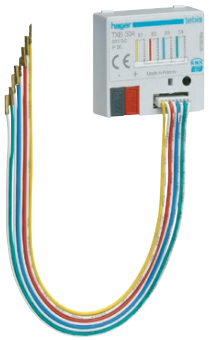


### 2-input universal module

| | |
|---|---|
| Contact current | 0.5 mA |
| Supply voltage | 30V DC |
| Busline max consumption | 7 mA |
| Dimensions | 38 x 35 x 12 mm |
| Degree of protection | IP 30 |
| Operating temperature | +0 ... +45°C |
| Storage temperature | -20 ... +70°C |
| Standards | EN 60 669-2-1<br>NF EN 50 428 |

- Universal input modules are used to interface contacts free of potential with KNX bus.
- In this way, push buttons, switches or conventional automatic controls can become communicating devices.
- 2 independent channels.

| Design | Order no. | PU |
|---|---|---|
| light grey, 2gang | **TXB302** | 1 |



### 4-input universal module

| | |
|---|---|
| Contact current | 0.5 mA |
| Supply voltage | 30V DC |
| Busline max consumption | 8 mA |
| Dimensions | 38 x 35 x 12 mm |
| Degree of protection | IP 30 |
| Operating temperature | +0 ... +45°C |
| Storage temperature | -20 ... +70°C |
| Standards | EN 60 669-2-1<br>NF EN 50 428 |

- Universal input modules are used to interface contacts free of potential with KNX bus.
- 4 independent channels.

| Design | Order no. | PU |
|---|---|---|
| light grey, 4gang | **TXB304** | 1 |



### 4 LED kit

| Suitable for | Order no. | Page |
|---|---|---|
| 2-input / 2-output indication of state | TXB322 | 120 |
| 4-input / 4-output indication of state | TXB344 | 120 |

| Design | Order no. | PU |
|---|---|---|
| Ø 5mm, red | **TG308** | 1 |

## Input / output modules

- Power supply by Bus.
- Control of 2 LEDs.
- The modules are associated with push buttons or switches and are installed in a flush-mounted wall box of diameter 60mm and adapted depth.
- Connection length to push button and LEDs shall not exceed 5m.
- Physical addressing is done using push button and LED.
- Application softwares are used to configure the individual inputs of the TXB322 products.
- The products allow controlling lighting, blinds, shutters, heating and scenes.
- The Priority function sends priority-start or priority-stop commands.
- The Scene function sends group controls to different kinds of outputs to create ambiences or scenarios (leaving home scenario, reading ambience, etc.).
- The Jamming function authorizes product locking. Jamming forbids sending commands.
- The 2-channel mode function allows controlling, with the same push button, 2 independent circuits having different functions.
- LED outputs (statusindication) control the lighting of standard LED signal lamps.



### 2-input / 2-output module LED (status indication)

| | |
|---|---|
| LED outputs specifications | I = 850 µA<br>U = 1.8V DC |
| Supply voltage | 30V DC |
| Busline max consumption | 15 mA |
| Dimensions | 38 x 35 x 12 mm |
| Degree of protection | IP 30 |
| Operating temperature | +0 ... +45°C |
| Storage temperature | -20 ... +70°C |
| Standards | EN 60 669-2-1<br>NF EN 50 428 |

- The universal input modules interface potential free contacts with KNX.
- Push buttons, switches and conventional automatisms can thus be used to drive standard LED indicators.
- Outputs can control conventional signaling LEDs.
- 2 independent channels.

| Suitable for | Order no. | Page |
|---|---|---|
| Berker TS Crystal | | 97 |
| Glass sensors with thermostat | | 91 |
| Push-button, NO contact | 1811 1. | 92 |
| **Optional** | | |
| 4 LED kit | TG308 | 119 |

| Design | Order no. | PU |
|---|---|---|
| light grey, 2gang | **TXB322** | 1 |



### 4-input / 4-output module LED (status indication)

| | |
|---|---|
| LED outputs specifications | I = 850 µA<br>U = 1.8V DC |
| Supply voltage | 30V DC |
| Busline max consumption | 15 mA |
| Dimensions | 38 x 35 x 12 mm |
| Degree of protection | IP 30 |
| Operating temperature | +0 ... +45°C |
| Storage temperature | -20 ... +70°C |
| Standards | EN 60 669-2-1<br>NF EN 50 428 |

- The universal input modules interface potential free contacts with KNX.
- 4 independent channels.

| Suitable for | Order no. | Page |
|---|---|---|
| Berker TS Crystal | | 97 |
| Glass sensors with thermostat | | 91 |
| Push-button, NO contact | 1811 1. | 96 |
| **Optional** | | |
| 4 LED kit | TG308 | 119 |

| Design | Order no. | PU |
|---|---|---|
| light grey, 4gang | **TXB344** | 1 |



### Universal interface 8-gang comfort

| | |
|---|---|
| Supply bus KNX | 24 VDC (+6 /-4 V) |
| Power consumption KNX | max. 6mA |
| Number of inputs | up to 8 |
| Wiring length | ≤ 10 m |
| Constant current | 0.8 mA |
| Dimensions | 44 x 48 x 32 mm |
| Ambient temperature | -5 °C to +45 °C |
| Protective system | IP20 |

The eight-port universal interface, extra has eight channels which work as inputs or outputs, depending upon the loaded application.

Separately programmable for each input: Switching, toggling, dimming (two-key principle)*, dimming (single-key principle), Venetian blind*, dimming value transmitter, calling lightscapes, storing lightscapes, control, forced action.

* For dimming (two-key principle) and Venetian blind applications, two inputs are necessary, in each case.

| Suitable for | Order no. | Page |
|---|---|---|
| Berker TS Crystal | | 97 |
| Glass sensors with thermostat | | 91 |
| Push-button, NO contact | 1811 1. | 96 |

| Design | Order no. | PU |
|---|---|---|
| light grey, 4gang | **TYB708D** | 1 |

## Binary inputs

- Power failure detection is available to filter false alarms due to cut-off of all inputs connected on the same reference phase.
- Output states are displayed on the product.
- Outputs can be controlled manually from the product
- Application software is used to configure the individual inputs
- The sensors associated to the inputs (push buttons, switches, automatic controls) are used to control lighting, shutters, blinds
- The Toggle Switch function changes the status of the controlled output whenever it is operated
- This function is used for switching lighting, blind or heating circuits ON or OFF. The command may come from switches, push buttons or automatic controls
- This function is used to control lighting circuits using one or two buttons
  - The ON / OFF function transmits the ON / OFF object (short key-press)
  - The Dimming function transmits the Dimming object (long key-press)
- This function controls a shutter or a blind using one or two push buttons.
  - The Up / Down function transmits the Up / Down object (long key-press)
  - The Stop / Angle function transmits the Stop / Angle object (short key-press)
- The Alarm 1 and Alarm 2 functions allow alarms coming from automatic controls to be periodically emitted (anemometer, rain detector, light sensitive switch, etc.)
- The Heating mode function is used to select a heating or air conditioning set point (Comfort, Eco, Frost protection, Absence).
- The command may come from switches, push buttons or automatic controls.
- The Value function (2 byte) is used for sending: Percentage %, Temperature °C, Luminosity level Lux, Brightness value % and Value 0-65535.
- The Scene function is used to select and storing scenes.
- The Timer function is used to switch ON or OFF a lighting circuit, shutters, heating for an adjustable time
- The Priority function allows an input to be forced to a defined status
- The Two Channel mode function allows controlling, with the same push button, two independent circuits having different functions.
- The Jamming function is used to lock an input via an object on the bus
- The power cut detection function is used for specific management of an input during a power cut, taking into account all the status changes which could occur during this period
- With programming button and red programming LED
- Bus connection via connecting terminal
- quickconnect terminal

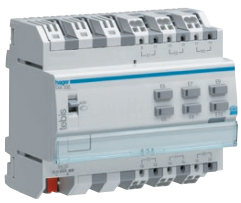


### 4-channel input module

| | |
|---|---|
| Signal voltage | 230V AC 50 Hz |
| Maximum connection distance per input | 100 m |
| Minimum contacts closing time | 18 ms |
| Low signal level | 0 -> 100 V |
| High signal level | > 195 V |
| Supply voltage | 30V DC |
| Busline max consumption | 4 mA |
| Width | 4 modules |
| Operating temperature | 0°C to +45°C |
| Connections | 0.75 to 2.5 mm² |

- Universal input modules allow interfacing 230V AC contacts supplied by KNX bus
- In this way, push buttons, switches or conventional automatic controls can become communicating devices
- 4 independent channels can be connected on different phases
- It is possible to connect 10 illuminated push buttons per channel

| Design | Order no. | PU |
|---|---|---|
| light grey | **TXA304** | 1 |

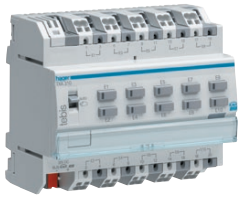


### 6-channel input module

| | |
|---|---|
| Signal voltage | 24 ... 230V AC (50Hz)/DC |
| Maximum connection distance per input | 100 m |
| Minimum contacts closing time | 50 ms |
| Supply voltage | 30V DC |
| Busline max consumption | 7 mA |
| Width | 6 modules |
| Operating temperature | 0°C to +45°C |
| Connections | 0.75 to 2.5 mm² |

- Universal input modules allow interfacing contacts free of potential or supplied with 24…230V AC/DC power by bus KNX.
- In this way, push buttons, switches or conventional automatic controls can become communicating devices.
- 6 independent channels with automatic recognition of the type of connected circuit (24…230V AC/DC or circuit free of potential).
- It is possible to connect 5 illuminated push buttons per channel

| Design | Order no. | PU |
|---|---|---|
| light grey | **TXA306** | 1 |



**10-channel input module**

| | |
|---|---|
| Signal voltage | 230V AC 50 Hz max |
| Maximum connection distance per input | 100 m |
| Minimum contacts closing time | 18 ms |
| Low signal level | 0 -> 100 V |
| High signal level | > 195 V |
| Supply voltage | 30V DC |
| Busline max consumption | 15 mA |
| Width | 6 modules |
| Operating temperature | 0°C to +45°C |
| Connections | 0.75 to 2.5 $mm^2$ |

- Universal input modules allow interfacing 230V AC contacts supplied by KNX bus
- In this way, push buttons, switches or conventional automatic controls can become communicating devices
- 10 independent channels can be connected on different phases

| Design | Order no. | PU |
|---|---|---|
| light grey | **TXA310** | 1 |

## Time switches



**2-channel electronic time switches weekly cycle**

| | |
|---|---|
| Supply voltage | Bus 30 V DC |
| Consumption | 9.5 mA max (TXA022)<br>10 mA max (TXA023) |
| IP | 20 |
| Operating temperature | -5 °C to 45°C |
| Size | 2 modules |

- Product delivered with current time and date set.
- Automatic change of winter / summer time
- Programming key:
  - for permanent overrides,
  - for program copy or save
- Programming for day or group of days
- 56 program steps On, Off , 1 s to 30 min pulse or options
- Permanent overrides On or Off (permanent light on).
- ON or OFF temporary priority settings, using configuration tools
- Temporary overrides On or Off (flashing)
- Holiday mode : overrides On or Off between two dates
- Simulation of presence
- Display bar graph of daily profile for both channels.
- Keyboard locking possible
- Programmable with power off
- DCF Synchronization (only for TXA023)
- Possible transmission of date and time on the bus

| Design | Order no. | PU |
|---|---|---|
| weekly time switch | **TXA022** | 1 |
| weekly time switch with DCF | **TXA023** | 1 |



**4-channel programmer annual and weekly cycle with programming key**

| | |
|---|---|
| Supply voltage | 21...32 V DC SELV |
| Bus consumption | max. 25mA |
| IP | 20 |
| Operating temperature | -10 °C to 50°C |
| Size | 4 modules |

- Product delivered with current time and date set.
- Automatic change of winter / summer time
- Programming key:
  - for permanent overrides,
  - for program copy or save
- Programming for day or group of days
- 300 program steps On, Off , ⎍ or ⎍⎍
- Permanent overrides On or Off ( ✋ permanent light on).
- Temporary overrides On or Off ( ✋ flashing)
- Overrides (temporary, permanent or time delayed) remote activation possible.
- Simulation of presence ⚄
- Keyboard lock function 🔒 by PIN number
- Counter of operating time on every output
- Programmable with power off
- Display with backlight

| Design | Order no. | PU |
|---|---|---|
| yearly time switch | **TYA720** | 1 |



### DCF receiver for time switch

| | | |
|---|---|---|
| Operating temperature | - 20 ... + 50 °C | – with radio receiver for the DCF77 signal |
| Line length | max. 200 m | – with wall bracket and screw fitting |
| Conductor cross-section (flexible) | 0.5 ... 1.5 mm² | |
| Conductor cross-section (rigid) | 0.5 ... 2.5 mm² | |

| Design | Order no. | PU |
|---|---|---|
| DCF receiver for time switch | **EG001** | 1 |



### Lock key

Avoids unrequested handling of the TXA022 and TXA023 time switches.

| Design | Order no. | PU |
|---|---|---|
| yellow | **EG004** | 1 |



### Programming key

Allows complementary programms back-up for TXA022 and TXA023 time switches.

| Design | Order no. | PU |
|---|---|---|
| grey | **EG005** | 1 |




### Storage tray for programming keys

| Suitable for | Order no. | Page |
|---|---|---|
| Blocking key for time switches | EG004 | 123 |
| Programming key for time switches | EG005 | 123 |

| Design | Order no. | PU |
|---|---|---|
| Storage tray for programming keys | **EG006** | 1 |



### USB programming software

| | |
|---|---|
| Operating temperature | 0 ... +40 °C |

| Design | Order no. | PU |
|---|---|---|
| USB programming software | **EG003G** | 1 |

## Consumption indicator and energy meters



### KNX consumption indicator

| | |
|---|---|
| Bus power supply | 30 V DC (TBTS) |
| Mains power supply | 230 V AC +10/-15% 50 Hz |
| Max. consumption on the bus | 15 mA to 30 V DC |
| Dissipated output | 0.5 W max |
| Connection capacity:<br>- for the upper terminals<br>- for the lower terminals | <br>0.75 to 2.5 $mm^2$<br>0.2 to 1.5 $mm^2$ |
| IP | 20 |
| Operating temperature | -5 °C to 45°C |
| Size | 6 modules |

The consumption indicator informs users of their consumption through 4 metering channels. It is used to monitor and control energy consumption and is built into an automatic global energy management system.

- This product can be used in a single-phase or three-phase installation. In three-phase, consumption is measured phase by phase
- The data is sent on the KNX bus
- In addition to metering, the consumption indicator also has:
  - 1 tariff input T1/T2
  - a temperature input for the connection of a probe
- The system can be constructed with several TE330. This thus makes it possible to measure one or more circuits using toroids
- The consumption indicator is adapted for use with domovea. In this case, the display devices are:
  - meter (consumption)
  - meter (production)
  - energy
  - power
  - sub-counter (consumption)
- It can also be interfaced with the ambiance units or other display systems thanks to objects sent on the KNX bus
- It is used to display the current tariff and the energy consumption according to the current tariff. The tariff can also be distributed to other devices on the bus
- Includes 3 current transformers and straps.

| Design | Order no. | PU |
|---|---|---|
| without current transformer | **TE332** | 1 |
| with current transformer | **TE331** | 1 |



### Current transformer 1850 - 1A

| | |
|---|---|
| CT ratio | up to 90 A |
| Operating range | 0.2 ... 90 A |
| Connection capacity (flexible) | 0.5 $mm^2$ |

| Suitable for | Order no. | Page |
|---|---|---|
| KNX consumption indicator | TE33. | 124 |

| Design | Order no. | PU |
|---|---|---|
| current transformer | **EK028** | 1 |



### Three phase energy meter, direct reading 100A

| | |
|---|---|
| Voltage | 230 V AC 50/60 Hz |
| Starting current | 80 mA |
| Base current | 20 A |
| Max current | 100 A |

Energy meters are aimed to measure the active energy consumed by an installation.

They permit to have under control the real cost of an installation and to divide the consumption between the different appliances.

- Fully compliant with the european standard EN50470-3.
- Class B.
- Accuracy 1%
- Energy readout : 7 digits.
- Backlighted display
- Indication of instantaneous power consumption
- Total / partial counter (excepted MID references)
- Pulsed ouput
- unlimited saving of measures.
- LED flashing according to consumption.
- Option : tarif 1 / tarif 2.
- Three phases energy meters are adapted to all kind of networks.
- Display indication in case of bad wiring.

| Design | Order no. | PU |
|---|---|---|
| light grey | **TE360** | 1 |



### Three phase energy meters, connection via current transformers

| | |
|---|---|
| Voltage | 230/400 V AC 50/60 Hz |
| Starting current | 10 mA |
| Max current on CT secondary | 6A |

Energy meters are aimed to measure the active energy consumed by an installation.

They permit to have under control the real cost of an installation and to divide the consumption between the different appliances.

- Fully compliant with the european standard EN50470-3.
- Class B.
- Accuracy 1%
- Energy readout : 7 digits.
- Backlighted display
- Indication of instantaneous power consumption
- Total / partial counter (excepted MID references)
- Pulsed ouput
- unlimited saving of measures.
- LED flashing according to consumption.
- Option : tarif 1 / tarif 2.
- Three phases energy meters are adapted to all kind of networks.
- Display indication in case of bad wiring.

| Design | Order no. | PU |
|---|---|---|
| light grey | **TE370** | 1 |





### Current transformers for TE360 and TE370

| Design | Order no. | PU |
|---|---|---|
| 50 / 5 A | **SRA00505** | 1 |
| 100 / 5 A | **SRA01005** | 1 |
| 150 / 5 A | **SRA01505** | 1 |
| 200 / 5 A | **SRA02005** | 1 |
| 250 / 5 A | **SRA02505** | 1 |
| 300 / 5 A | **SRI03005** | 1 |
| 400 / 5 A | **SRC04005** | 1 |
| 600 / 5 A | **SRC06005** | 1 |
| 800 / 5 A | **SRD08005** | 1 |
| 1000 / 5 A | **SRD10005** | 1 |
| 1500 / 5 A | **SRD15005** | 1 |
| 2000 / 5 A | **SRE20005** | 1 |



### KNX impuls gateway

| | |
|---|---|
| Powering through the bus | 20 to 30 V ⎓ TBTS |
| Bus consumption | TXE771: 7 mA max (6 mA typ)<br>TXE773: 8 mA max (6 mA typ) |
| Battery capacity | 1.2 Ah |
| Protection index | IP44 |
| Operating temperature | -20°C to +55°C |
| Dimensions | 150 x 85 x 35 mm |

Powered by the bus, these two gateways count pulses (multi-energy).

- An integrated battery ensures metering for 30 days of bus cutout and data backup.
- The input not only allows interfacing S0 signals of type EN62053-31 and EN1434-2, EN1434-3 but also potential free contacts.
- The gateways transmits the metering data from the flow or energy sensors to the bus.
- Pulse visualizer LED
- Synchronization with the existing electricity tariff through the bus possible with KNX TE331 consumption indicators
- 1 totalizing meter + 1 partial meter for each measurement category
- Setting of pulse inputs. Each of the inputs must be set to define the type of measurement category and the weight of the pulses:
  - Volume or energy for calorimetry.
  - Volume for the flowmeter
  - Volume of gas meters
  - Energy for the electric meters

| Design | Order no. | PU |
|---|---|---|
| light grey, single input | **TXE771** | 1 |
| light grey, triple input | **TXE773** | 1 |

## Din rail switching actuators

- Common parameter of switching actuator
- Output states are displayed on the product.
- Outputs can be controlled manually from the product
- Each output to be individually configurated for Lighting or Heating
- The ON/OFF function is used to switch a lighting circuit ON or OFF
- The Status indication function displays the status of the output contact
- The Timer function is used to switch a lighting circuit ON or OFF for an adjustable time
- The Time delayed switch function combines a toggle function and a cut-off delay
- The Priority function allows overriding an output to a definite status, ON or OFF
- The Jamming function allows locking an output in its current status
- Each output may be integrated into 32 different scenes
- The Timer and Automatic controls function allow the outputs to by controlled by:
    - Timer functions: Timer/toggle change over, Switching delay, Tripping delay, Switching and tripping delay, Timer.
    - Automatic control functions: Authorization, Logical AND or Logical

OR

- Each output may be integrated into 32 different scenes
- Manual override, permanent or Time limited.
- Behavior in the event of bus voltage failure/Return configurable
- With programming button and red programming LED
- Bus connection via connecting terminal
- quickconnection terminal

| | Max. switching capacity for switching actuators | | | | | |
|---|---|---|---|---|---|---|
| | TYA604A<br>TYA606A<br>TYA608A<br>TYA610A | TYA604B<br>TYA606B<br>TYA608B<br>TYA610B | TYA604C<br>TYA606C<br>TYA608C<br>TYA610C | TYA604D<br>TYA606D<br>TYA608D<br>TYA610D<br>TYM616D<br>TYM620D<br>TYF616 | TYA606E | TYB601B<br>TYB602F<br>TYB692F |
| 230 V incandescent and halogen lamps | 800 W | 1200 W | 2300 W | 2300 W | 2300 W | 600 W |
| Halogen ELV (12 or 24V) via ferromagnetic transformer | 800 W | 1200 W | 1600 W | 1600 W | 1600 W | 600 W |
| Halogen ELV (12 or 24V) via Electronic transformer | 800 W | 1000 W | 1200 W | 1200 W | 1380 W | 600 W |
| Fluorescent tubes non compensated | 800 W | 1000 W | 1200 W | 1200 W | 800 W | 600 W |
| Fluorescent tubes for electronic ballast | 450 W | 550 W | 725 W | 725 W | 25 x 18 W | 6 X 58 W |
| Parallel compensated fluorescent tubes | - | - | - | 1500 W (200µF) | 1000 W (130µF) | - |
| Compact fluorescent with PF < 0.6 | 150 W | 300 W | 425 W | 425 W | 25 x 18 W | 6 X 18 W |



**4-channel switching actuator 4A/10A/16A/16A (Capacitive Load)**

| | |
|---|---|
| Supply voltage | 30 V DC |
| Power dissipation | 1 W (TYA204A)<br>3 W (TYA204B)<br>8 W (TYA204C)<br>8 W (TYA204D) |
| Width | 4 modules |
| Operating temperature | 0°C to +45°C |
| Connections | 0.75 to 2.5 $mm^2$ |

- The 4-fold output module TYA604. are relays designed to interface Bus KNX with on/off electric loads
- 4 volt-free contacts

| Design | Order no. | PU |
|---|---|---|
| switching actuator 4A | **TYA604A** | 1 |
| switching actuator 10A | **TYA604B** | 1 |
| switching actuator 16A | **TYA604C** | 1 |
| switching actuator 16A for capacitive load | **TYA604D** | 1 |

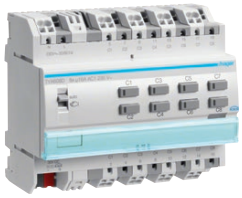


### 6-channel switching actuator 4A/10A/16A/16A (Capacitive Load)

| | |
|---|---|
| Supply voltage | 30 V DC |
| Power dissipation | 1 W (TYA206A)<br>5 W (TYA206B)<br>12 W (TYA206C)<br>12 W (TYA206D)<br>6 W (TYA206E) |
| Width | 4 modules<br>6 modules (TYA606E) |
| Operating temperature | 0°C to +45°C |
| Connections | 0.75 to 2.5 mm² |

- The 6-fold output module TYA606. are relays designed to interface Bus KNX with on/off electric loads
- 6 volt-free contacts

| Design | Order no. | PU |
|---|---|---|
| switching actuator 4A | **TYA606A** | 1 |
| switching actuator 10A | **TYA606B** | 1 |
| switching actuator 16A | **TYA606C** | 1 |
| switching actuator 16A for capacitive load | **TYA606D** | 1 |
| switching actuator 16A for capacitive load with current monitoring | **TYA606E** | 1 |

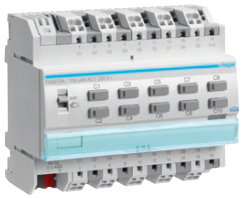


### 8-channel switching actuator 4A/10A/16A/16A (Capacitive Load)

| | |
|---|---|
| Supply voltage | 30 V DC |
| Power dissipation | 2 W (TYA206A)<br>6 W (TYA206B)<br>12 W (TYA206C)<br>12 W (TYA206D) |
| Width | 6 modules |
| Operating temperature | 0°C to +45°C |
| Connections | 0.75 to 2.5 mm² |

- The 8-fold output module TYA608. are relays designed to interface Bus KNX with on/off electric loads
- 8 volt-free contacts

| Design | Order no. | PU |
|---|---|---|
| switching actuator 4A | **TYA608A** | 1 |
| switching actuator 10A | **TYA608B** | 1 |
| switching actuator 16A | **TYA608C** | 1 |
| switching actuator 16A for capacitive load | **TYA608D** | 1 |



### 10-channel switching actuator 4A/10A/16A/16A (Capacitive Load)

| | |
|---|---|
| Supply voltage | 30 V DC |
| Power dissipation | 3 W (TYA206A)<br>7 W (TYA206B)<br>15 W (TYA206C)<br>15 W (TYA206D) |
| Width | 6 modules |
| Operating temperature | 0°C to +45°C |
| Connections | 0.75 to 2.5 mm² |

- The 10-fold output module TYA610. are relays designed to interface Bus KNX with on/off electric loads
- 10 volt-free contacts
- Each output to be individually configurated for Lighting or Shutters/Blinds applications
- Shutters/Blinds applications required two Output Channel

| Design | Order no. | PU |
|---|---|---|
| switching actuator 4A | **TYA610A** | 1 |
| switching actuator 10A | **TYA610B** | 1 |
| switching actuator 16A | **TYA610C** | 1 |
| switching actuator 16A for capacitive load | **TYA610D** | 1 |



### Output 16A C-Load adapted / shutter / blind

| | |
|---|---|
| Supply voltage KNX | DC21...32 V SELV |
| Power dissipation | max. 20 W (TYM616D)<br>max. 25 W (TYM620D) |
| Width | 8 modules (TYM616D)<br>10 modules (TYM620D) |
| Operating temperature | -5°C to +45°C |
| Connections | 0.5 to 6 mm² (rigid)<br>0.5 to 4 mm² (flexible) |

The device receives telegrams from sensors or other controllers via the KNX installation bus and switches electrical loads with its independent relay contacts. The devices are particularly suitable for capacitive loads and are designed for high-load currents.

| Design | Order no. | PU |
|---|---|---|
| output 16A C-Load 16gang | **TYM616D** | 1 |
| output 16A C-Load 20gang | **TYM620D** | 1 |



**Multi-application outputs module 10 A**

| | |
|---|---|
| Supply voltage KNX | DC21...32 V SELV |
| Minimum switching current | 100 mA |
| 230 V AC shutter motors | 6 A max |
| 230 V AC fan-coil unit motors | 4 A max |
| 24 V DC shutter motors | 6 A max |
| Surge voltage | 4 kV |
| Protection rating (box) | IP20 |
| Protection rating of box under faceplate | IP30 |
| Width | 10 modules |
| Operating temperature | -5°C to +45°C |
| Screw terminal connection | 0.75 to 4 mm² |

The device receives telegrams from sensors or other controllers via the KNX installation bus and switches electrical loads with its independent relay contacts.

| Design | Order no. | PU |
|---|---|---|
| Multi-application outputs module 10 A | **TYF616** | 1 |



**Busbars and endcaps for output modules**

| | |
|---|---|
| Cu cross section | 6 mm² |
| Rated current In | 16 A 250 V AC |
| Operating temperature | +5°C to +45°C |
| Storage temperature | -25°C to +70°C |
| Moisture resistance | max. 85% RH non-condensing at 20°C |
| Contact pin (HxWxD) | 1 x 2.5 x 12.5 mm |

The busbars are used to ease the connection of output relays to a dedicated phase by decrease the necessary time to bridge the phase to the different output relays.

| Design | Order no. | PU |
|---|---|---|
| busbar for TXM616D, 8-pin busbars | **TGM616D** | 2 |
| busbar for TXM620D, 10-pin busbars | **TGM620D** | 2 |





**Endcaps for output modules**

| Design | Order no. | PU |
|---|---|---|
| endcaps for TGM616D or TGM620D busbars | **TGM600E** | 10 pairs |

## Din rail dim actuators

### Universal dim actuators

- 1 dimming channel controlled by KNX bus.
- Universal dimmer with automatic load recognition
- Min/Max level local setting.
- Display of channel state on the product.
- Manual mode that allows dimming even when the bus is disconnected.
- Control button for manual mode.
- Per channels 32 light scenes with a related scene speed
- Short-circuit, over heating & overload protection with LED indication
- With programming button and red programming LED in same button.
- Bus connection via connecting terminal.
- quickconnect terminal.



**1-channel universal dimmer 300W**

| | |
|---|---|
| Supply voltage | 30 V DC 230 V AC 50/60 Hz |
| Busline max consumption | 2.3 mA |
| Consumption without load | 3 W |
| Power dissipation | 4 W |
| Width | 4 modules |
| Operating temperature | -5°C to +45°C |
| Connections | 0.75 to 2.5 mm² |

- 230 V incandescent and halogen lamps 300W
- Halogen ELV (12 or 24V) via ferromagnetic transformer suitable for dimming 300VA.
- Halogen ELV (12 or 24V) via electronic transformer suitable for dimming 300W
- Dimmable CFL lamp (CFLi) with integrated ballast suitable for dimming 60W
- Dimmable LED lamp(LEDi) with integrated ballast suitable for dimming 60W

| Design | Order no. | PU |
|---|---|---|
| light grey | **TYA661AN** | 1 |

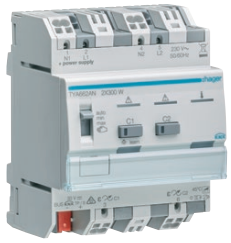


### 1-channel universal dimmer 600W

| | |
|---|---|
| Supply voltage | 30 V DC 230 V AC 50/60 Hz |
| Busline max consumption | 2.3 mA |
| Consumption without load | 3 W |
| Power dissipation | 7.5 W |
| Width | 4 modules |
| Operating temperature | -5°C to +45°C |
| Connections | 0.75 to 2.5 mm² |

- 230 V incandescent and halogen lamps 600W
- Halogen ELV (12 or 24V) via ferromagnetic transformer suitable for dimming 600VA.
- Halogen ELV (12 or 24V) via electronic transformer suitable for dimming 600W
- Dimmable CFL lamp (CFLi) with integrated ballast suitable for dimming 120W
- Dimmable LED lamp (LEDi) with integrated ballast suitable for dimming 120W

| Design | Order no. | PU |
|---|---|---|
| light grey | **TYA661BN** | 1 |



### 2-channel universal dimmer 300W

| | |
|---|---|
| Supply voltage | 230 V AC 50/60 Hz |
| Busline max consumption | 2.3 mA |
| Consumption without load | 300 mW |
| Power dissipation per output | 2 W |
| Width | 4 modules |
| Operating temperature | -5°C to +45°C |
| Connections | 0.75 to 2.5 mm² |

- 230 V incandescent and halogen lamps 300W
- Halogen ELV (12 or 24V) via ferromagnetic transformer suitable for dimming 300VA.
- Halogen ELV (12 or 24V) via electronic transformer suitable for dimming 300W
- Dimmable CFL lamp (CFLi) with integrated ballast suitable for dimming 60W
- Dimmable LED lamp(LEDi) with integrated ballast suitable for dimming 60W

| Design | Order no. | PU |
|---|---|---|
| light grey | **TYA662AN** | 1 |

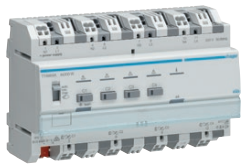


### 3-channel universal dimmer 300W

| | |
|---|---|
| Supply voltage | 30 V DC 230 V AC 50/60 Hz |
| Busline max consumption | 2.3 mA |
| Consumption without load | 5 W |
| Power dissipation | 8.9 W |
| Width | 6 modules |
| Operating temperature | -5°C to +45°C |
| Connections | 0.75 to 2.5 mm² |

- 1, 2, or 3 dimming channels controlled by KNX bus.
- The product can control 1, 2 or 3 independent lighting circuits, the outputs number depends on the switch position.
- 230 V incandescent and halogen lamps 300W, 600W, 900W according to output selector switch per channel.
- Halogen ELV (12 or 24V) via ferromagnetic transformer suitable for dimming 300W, 600W, 900W according to output selector switch per channel.
- Halogen ELV (12 or 24V) via electronic transformer 300W, 600W, 900W according to output selector switch per channel.
- Dimmable CFL lamp (CFLi) with integrated ballast suitable for dimming 210W, 120W, 60W according to output selector switch per channel.
- Dimmable LED lamp (LEDi) with integrated ballast suitable for dimming 210W, 120W, 60W according to output selector switch per channel.

| Design | Order no. | PU |
|---|---|---|
| light grey | **TYA663AN** | 1 |

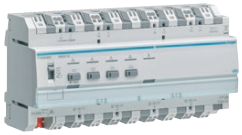


### 4-channel universal dimmer 300W

| | |
|---|---|
| Supply voltage | 30 V DC 230 V AC 50/60 Hz |
| Busline max consumption | 2.3 mA |
| Consumption without load | 1 W |
| Power dissipation | 7.5 W |
| Width | 8 modules |
| Operating temperature | -5°C to +45°C |
| Connections | 0.75 to 2.5 mm² |

- 230 V incandescent and halogen lamps 300W
- Halogen ELV (12 or 24V) via ferromagnetic transformer suitable for dimming 300VA.
- Halogen ELV (12 or 24V) via electronic transformer suitable for dimming 300W
- Dimmable CFL lamp (CFLi) with integrated ballast suitable for dimming 60W
- Dimmable LED lamp(LEDi) with integrated ballast suitable for dimming 60W

| Design | Order no. | PU |
|---|---|---|
| light grey | **TYA664AN** | 1 |



**4-channel universal dimmer 600W**

| | |
|---|---|
| Supply voltage | 30 V DC 230 V AC 50/60 Hz |
| Busline max consumption | 2.3 mA |
| Consumption without load | 1 W |
| Power dissipation | 8.9 W |
| Width | 10 modules |
| Operating temperature | -5°C to +45°C |
| Connections | 0.75 to 2.5 mm² |

- 230 V incandescent and halogen lamps 600W
- Halogen ELV (12 or 24V) via ferromagnetic transformer suitable for dimming 600VA.
- Halogen ELV (12 or 24V) via electronic transformer suitable for dimming 600W
- Dimmable CFL lamp (CFLi) with integrated ballast suitable for dimming 120W
- Dimmable LED lamp(LEDi) with integrated ballast suitable for dimming 120W

| Design | Order no. | PU |
|---|---|---|
| light grey | **TYA664BN** | 1 |

## 1 - 10 V / DALI interfaces



**3-channel 1 - 10 V dimmer**

| | |
|---|---|
| Supply voltage | 30 V DC 230 V AC 50/60 Hz |
| Busline max consumption | 2.3 mA |
| Consumption without load | 3 W |
| Power dissipation | 9 W |
| Control current per channel | 50 mA max |
| Switching current | 16A |
| 230 V incandescent and halogen lamps | 2300 W |
| Halogen ELV (12 or 24V) via ferromagnetic transformer/ electronic transformer | 1500 VA / 1500 W |
| Electronic Ballast 1-10V | 1000 W |
| Dimmable Electronic Ballast | 50 mA max |
| Light Dimmer | 30 max |
| Width | 4 modules |
| Operating temperature | 0°C to +45°C |
| Connections | 1 to 6 mm² (screw terminal) |

- 3 dimming channels controlled by bus KNX
- Control lighting circuits via a 1/10V connection, acting upon remote control dimmers or electronic ballasts
- Min/Max level local setting
- State of channel displayed on product
- Manual control of channels available locally on the product for Wiring, testing and start-up
- After power on, a 20-sec delay is required for the dimmer switch to perform the first control operation
- With potential-free NO contacts
- Basic brightness programmable
- Behavior in the event of bus voltage failure configurable
- With programming button and red programming LED
- Bus connection via connecting terminal
- With screw terminals

| Design | Order no. | PU |
|---|---|---|
| light grey | **TX211A** | 1 |



**KNX DALI-Gateway**

| | |
|---|---|
| KNX supply voltage | 21 ... 32 V DC SELV |
| External supply voltage | 110...240 V AC +10%/-15% 50/60 Hz |
| Busline max consumption | typically 150 mW |
| Power consumption | max. 6 W |
| Total power loss | max. 3 W |
| Operating temperature | -5°C to +45°C |
| Connections | screw terminal preferably on top |
| DALI voltage | typically 16 V DC with overvoltage protection |
| DALI current | typically 128mA max. 200mA temporarily |

- Control of a maximum of 64 DALI devices in a max. of 32 groups
- Manual control of the groups independent of the bus (site operation with broadcast control)
- Feedback of DALI error status or short-circuit and supply voltage failure message
- Central switching function
- Incorporation of the groups into up to 16 lightscenes possible
- All channel-oriented functions can be parameterized separately for each group. This feature permits independent and multi-functional control of the DALI devices
- The Staircase timer function can only be parameterized for groups 1 ... 16
- Adjusting the limit values for brightness is possible.
- Dimming response can be parameterized.
- Soft-On or Soft-Off function
- Disable function or, alternatively, forced-control position function can be parameterized for each group, with the disable function, blinking of lighting groups is possible
- Timer functions (ON-delay, OFF-delay, staircase lighting function, also with pre-warning function)
- Response to bus voltage failure and bus voltage return as well as after ETS programming can be adjusted for each group
- Automatic device replacement
- With programming button and red programming LED
- Bus connection via connecting terminal
- With screw terminals preferably on top

| Design | Order no. | PU |
|---|---|---|
| light grey | **TYA670D** | 1 |

## 3-channel LED controller



### 3-channel LED controller - voltage controlled

| | |
|---|---|
| Supply voltage | 12-24 V DC |
| Maximum charge | 2.2 A / channel |
| Max power | 12V DC 80 W<br>24V DC 155 W |
| Control mode | direct voltage |
| Number of channel | 1-3 |
| Control signal | KNX |
| Consumption on the KNX bus | Max. 12 mA |
| Operating temperature | -5°C to +45°C |
| Connections | KNX wire 0.75 to 1.5 $mm^2$<br>(screw-on terminal block) |
| Output signal | PWM / 600Hz |
| Max. cable length | 10 m |
| Protection degree | IP20 |

- 3 variation channels controlled by the KNX bus
- 60 scenes called up by the KNX bus
- 4 different colour sequences including up to 12 colours per sequence.
- Short circuit protection
- Overheating protection
- Electrical surge protection
- Polarity reversal protection

The TYB673A 3-channel LED controller can be used to vary the luminosity of a voltage controlled LED module.
This product can be used more particularly to control a coloured lighting system, create lighting effects or launch a sequence of pre-programmed colours.

| Design | Order no. | PU |
|---|---|---|
| black | **TYB673A** | 1 |



### 3-channel LED controller - current controlled

| | |
|---|---|
| Supply voltage | 24 V DC |
| Output current | 350/500/700 mA |
| Control mode | direct current |
| Max output voltage | 22V DC |
| Number of channel | 1-3 |
| Control signal | KNX |
| Consumption on the KNX bus | Max. 12 mA |
| Operating temperature | -5°C to +45°C |
| Connections | KNX wire 0.75 to 1.5 $mm^2$<br>(screw-on terminal block) |
| Output signal | PWM / 600Hz |
| Max. cable length | 10 m |
| Protection degree | IP20 |

- 3 variation channels controlled by the KNX bus
- 60 scenes called up by the KNX bus
- 4 different colour sequences including up to 12 colours per sequence.
- Short circuit protection
- Overheating protection
- Electrical surge protection
- Polarity reversal protection

| **Suitable for** | **Order no.** | **Page** |
|---|---|---|
| Power supply 24 V DC 1A | TGA200 | 140 |

The TYB673B 3-channel LED controller can be used to vary the luminosity of a current controlled LED module.
This product can be used more particularly to control a coloured lighting system, create lighting effects or launch a sequence of pre-programmed colours.

| Design | Order no. | PU |
|---|---|---|
| black | **TYB673B** | 1 |

## Din rail blind actuators

- Outputs can be controlled manually from the product
- Output states are displayed on the product
- Delay time between 2 opposite directions 600 ms.
- Application softwares allow each output to be individually configurated for Shutter/Blind applications.
- The Up/Down Function allows moving up or down a shutter, a blind with inclinable slats, an awning, a Venetian blind, etc.
- The Up/Down function also allows opening and closing electric curtains.
- The Slat angle/Stop function allows inclining the slats of a blind or stopping its current movement.
- The Slat angle/Stop function allows modifying the occultation or the direction of the light beams coming from outside.
- The Stop function allows stopping the current shutter movement.
- The Position in % function allows putting a shutter or a blind in a desired position expressed in % of closure.
- The Slat angle function allows inclining the slats of a blind into a desired position expressed in degrees (0° to 180°).
- Wind alarm and rain alarm functions allow putting a shutter or a blind in a configurable predefined status.
- The Priority function allows forcing a shutter or a blind into a predefined position.
- The Jamming function allows locking a shutter or a blind in its current position.
- Each output may be integrated into 32 different scenes.
- The Status indication function allows sending on the bus:
    - Status indication (1 byte): indicates the current operating mode of the output (Alarm, Priority, Jamming, and Normal)
    - Position indication in %: indicates the position of the shutter or blind
    - Slat angle indication in °: indicates the position of the shutter or blind
    - Status indication (1Bit): indicates the last movement, up or down, of the shutter or blind



**Output device for 4 shutters 230V AC**

| | |
|---|---|
| Supply voltage | 30 V DC SELV |
| Power dissipation | 2W |
| Typical consumption on the KNX bus | 5,2 mA |
| Standby consumption on the KNX bus | 4,5 mA |
| Width | 4 modules |
| Operating temperature | -5°C to +45°C |
| Connections | 0.75 to 2.5 mm² |
| Breaking capacity | µ230 V, 6A AC1 |
| Surge voltage | 4kV |
| Protection degree | IP20 |

- 4 independent channels controlled by bus KNX.
- Output states are displayed on the product.
- Outputs can be controlled manually from the product.

Each product feature depends on its configuration and settings.

The 4-output drivers TYA624A and TYA624C are actuators that allow interfacing Bus KNX with opening devices. They are part of the tebis Installation System and are designed to control such devices as rolling shutters, blinds with awnings, blinds with slats, etc.

| Design | Order no. | PU |
|---|---|---|
| output device for 4 shutters | **TYA624A** | 1 |
| output device for 4 shutters and / or blinds | **TYA624C** | 1 |



## Output device for 4 shutters 24V DC

| | |
|---|---|
| Supply voltage | 30 V DC SELV |
| Power dissipation | 2W |
| Typical consumption on the KNX bus | 5,2 mA |
| Standby consumption on the KNX bus | 4,5 mA |
| Width | 4 modules |
| Operating temperature | -5°C to +45°C |
| Connections | 0.75 to 2.5 $mm^2$ |
| Breaking capacity | µ 24V DC 6A DC1 |
| Surge voltage | 4kV |
| Protection degree | IP20 |

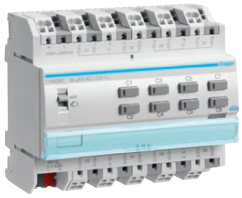
- 4 independent channels controlled by bus KNX.
- output states are displayed on the product.
- outputs can be controlled manually from the product.

Each product feature depends on its configuration and settings.

| Suitable for<br>Optional | Order no. | Page |
|---|---|---|
| Power supply 24 V DC 1A | TGA200 | 140 |

The 4-output drivers TYA624B and TYA624D are actuators that allow interfacing Bus KNX with opening devices. They are part of the tebis Installation System and are designed to control such devices as rolling shutters, blinds with awnings, blinds with slats, etc.

| Design | Order no. | PU |
|---|---|---|
| output device for 4 shutters | **TYA624B** | 1 |
| output device for 4 shutters and / or blinds | **TYA624D** | 1 |



## Output device for 8 shutters 230V AC

| | |
|---|---|
| Supply voltage | 30 V DC SELV |
| Power dissipation | 2W |
| Typical consumption on the KNX bus | 15.8 mA |
| Standby consumption on the KNX bus | 8.8 mA |
| Width | 6 modules |
| Operating temperature | -5°C to +45°C |
| Connections | 0.75 to 2.5 $mm^2$ |
| Breaking capacity | µ230 Vv 6A AC1 |
| Surge voltage | 4kV |
| Protection degree | IP20 |

- 8 independent channels controlled by bus KNX.
- product display of outputs status with or without the presence of bus and/or main supply (230V~).
- the outputs may be switched with or without the presence of bus and/or main supply (230V~).

Each product feature depends on its configuration and settings.

The 8-output drivers TYA628A and TYA628C are actuators that allow interfacing Bus KNX with opening devices. They are part of the tebis Installation System and are designed to control such devices as rolling shutters, blinds with awnings, blinds with slats, etc.

| Design | Order no. | PU |
|---|---|---|
| output device for 8 shutters | **TYA628A** | 1 |
| output device for 8 shutters and / or blinds | **TYA628C** | 1 |



## Output 12-gang shutter/blind 230V AC

| | |
|---|---|
| Rated voltage KNX | 30 V DC SELV |
| Power dissipation | 3W |
| Typical consumption on the KNX bus | 7 mA |
| Standby consumption on the KNX bus | 5 mA |
| Width | 10 modules |
| Operating temperature | -5°C to +45°C |
| Connections | 0.5 to 6 $mm^2$ |
| Breaking capacity | µ230 V, 4A AC1 |
| Surge voltage | 4kV |
| Protection degree | IP20 |

- independent outputs, activation via KNX bus
- status display of the outputs on the device
- manual activation of the outputs on the device possible, building site operation
- position can be started directly
- 3 alarms
- scene function
- forced position by higher-level controller
- connection of various external conductors possible
- slat position directly controllable

The device is used to control motor-operated building fi ttings such as shutters and blinds via the KNX bus. The device has 12 outputs from which each output can be activated independently.

| Design | Order no. | PU |
|---|---|---|
| output device for 12 shutters/blinds | **TYM632C** | 1 |

## Modular blind actuators



### 2 flush mounted output / 1 shutter/blinds 6A twisted pair

| | |
|---|---|
| Supply voltage KNX | 21...32 V DC SELV |
| Typical consumption on the KNX bus | 7 mA |
| Standby consumption on the KNX bus | 5 mA |
| Dimensions | 44 x 43 x 22.5 mm |
| Operating temperature | -5°C to +45°C |
| Connections | 0.75 to 2.5 mm² |
| Breaking capacity | µ6A AC1 230V~ |
| Surge voltage | 4kV |
| Protection degree | IP20 |

The device receives telegrams from sensors or other controllers via the KNX installation bus and switches electrical loads with its relay contact.

| Design | Order no. | PU |
|---|---|---|
| flush mounting | **TYB602F** | 1 |



### 1 flush mounted output for shutter/blinds / 2 outputs + 2 inputs

| | |
|---|---|
| Supply voltage KNX | 21...32 V DC SELV |
| Typical consumption on the KNX bus | 7 mA |
| Standby consumption on the KNX bus | 5 mA |
| Dimensions | 44 x 43 x 22.5 mm |
| Operating temperature | -5°C to +45°C |
| Connections | 0.75 to 2.5 mm² |
| Breaking capacity | µ6A AC1 230V~ |
| Surge voltage | 4kV |
| Protection degree | IP20 |

The device receives telegrams from sensors or other controllers via the KNX installation bus and switches electrical loads with its relay contact.

| Design | Order no. | PU |
|---|---|---|
| flush mounting | **TYB692F** | 1 |



### Output 1-gang 10A, flush mounted

| | |
|---|---|
| Supply voltage | 21...32 V DC SELV |
| Typical consumption on the KNX bus | 7 mA |
| Standby consumption on the KNX bus | 5 mA |
| Dimensions | 44 x 43 x 22.5 mm |
| Operating temperature | -5°C to +45°C |
| Connections | 0.75 to 2.5 mm² |
| Breaking capacity | µ10A AC1 230 V ~ |
| Surge voltage | 4kV |
| Protection degree | IP20 |

The device receives telegrams from sensors or other controllers via the KNX installation bus and switches electrical loads with its relay contact.

-- Time switching functions.

-- manual activation of the outputs on the device possible, building site operation.

-- Status display of the outputs on the device.

-- Scene function.

-- Forced position by higher-level controller.

| Design | Order no. | PU |
|---|---|---|
| light grey | **TYB601B** | 1 |



### Universal dim actuator 1-gang flush-mounted

| | |
|---|---|
| Rated voltage KNX | 21...32 V DC SELV |
| Mains frequency | 50 / 60 Hz |
| Rated voltage | AC 230 V ~ |
| Incandescent lamps | 50 ... 210 W |
| HV halogen lamps | 50 ... 210 W |
| Inductive transformers | 50 ... 210 VA |
| Tronic transformers | 50 ... 210 W |
| Operating temperature | -5 °C...+45 °C |
| Dimensions | Ø 53 x 28 mm |

- automatic selection of the dimming principle suitable for the load
- protected against no-load, short-circuit and overheating
- feedback of the switching position and the dimming value
- configurable switch-on and dimming behaviour
- Timed dimmer: switch-on delay, switch-off delay, staircase lighting timer
- Light scene operation
- Two binary inputs for potential-free contacts, usable as extension inputs for local operation
- Supply via bus, no additional power supply necessary
- Mains failure longer than approx. 0.7 seconds leads to switch-off of the dimmer actuator.

| Design | Order no. | PU |
|---|---|---|
| light grey | **TYB691F** | 1 |

## Din rail HVAC actuators



### Din rail heating actuator 6-gang 230 V

| | |
|---|---|
| Operating voltage over bus | 21 ... 32 V= |
| Auxiliary voltage | 230/240 V~ |
| Frequency | 50/60 Hz |
| Switching current at 250 V~ | max. 50 mA |
| Actuators per channel | max. 4 |
| Operating temperature | -5 ... +45 °C |
| Assembling height as from DIN rail | 58 mm |
| Dimensions (W x H x D) | 72 x 90 x 65 mm |
| Width of rail mounted device (RMD) | 4 TE |

- valve drives for thermoelectric valve drives 230 V, closed in de-energized state
- for individual single room temperature control
- for continuous (PI) or switched (2-point) control
- with programming button and red programming LED
- bus connection via connecting terminal
- with emergency programme, e.g. for sensor or bus failure
- with screw terminals

| Suitable for | Order no. | Page |
|---|---|---|
| KNX valve drive 230V | EK723 | 136 |
| KNX valve drive 24V AC/DC | EK724 | 136 |

| Design | Order no. | PU |
|---|---|---|
| light grey | **TYF656T** | 1 |



### Din rail fan coil actuator 2-gang

| | |
|---|---|
| Operating voltage over bus | 21 ... 32 V= |
| Auxiliary voltage | 230 V~ |
| 230 V incandescent lamps | 2300 W |
| 230 V halogen lamps | 2300 W |
| Conventional transformers | 1200 W |
| Electronic transformers | 1500 W |
| Fluorescent lamps: | |
| - uncompensated | 1000 W |
| - parallel compensated | 1160 W /140 µF |
| Operating temperature | -5 ... +45 °C |
| Assembling height as from DIN rail | 63 mm |
| Dimensions (W x H x D) | 72 x 90 x 70 mm |
| Width | 4 modules |

Comply with the fan convector manufacturer's instructions.
Optimised for commissioning with ETS3 from version D, patch A.

- for the electric activation of fan convectors
- for converting RTR control variables into valve positions, fan stages
- activation of 1 or 2 fan channels with 6 or 3 fan stages
- for operating modes heating/cooling or heating and cooling
- manual activation of blow fans using push-buttons or the operating panel
- use of free channels to control switching loads
- 4 manual operation buttons for controlling fan stages and bus function on/off
- manual operating also possible without bus e.g. on building site
- with programming button and red programming LED
- with 8 red status LEDs and 3 red LEDs as manual actuation indication
- bus connection via connecting terminal
- with screw terminals

| Design | Order no. | PU |
|---|---|---|
| light grey | **TYF642F** | 1 |

## Valve drives



### KNX valve drive

| | |
|---|---|
| Operating voltage over bus | 21 ... 32 V= |
| Operating temperature | 0°C to +50°C |
| Pre-assembled cables | ≈ 1 m |
| Dimensions (L x W x H) | 65 x 50 x 82 mm |

- suitable for standard heater valve tappets
- with programming button and red programming LED
- Functions summer operation and forced mode
- with 2 independent binary inputs
- with 5 LEDs for display of valve stroke
- with integrated bus coupling unit
- bus connection via connecting terminal

| Design | Order no. | PU |
|---|---|---|
| white | **TX501** | 1 |



### KNX valve drive

| | |
|---|---|
| Power supply | bus KNX 30V DC TBTS |
| Power consumption | < 10 mA |
| Run time | < 20 s/mm |
| Set force | > 120N |
| Maximal stroke | 6 min |
| Target value display | 5 LEDs |
| Operating temperature | 0°C to +50°C |
| Dimensions | 82 x 50 x 65 mm |

- Automatic regulating apparatus and temperature collection apparatus.
- Work mode: Comfort, Standby, Night time, Frost.
- Oriented start up
- Forced service
- Summer operation

| Design | Order no. | PU |
|---|---|---|
| white | **TX502** | 1 |



### Electrothermal valve drive

| | |
|---|---|
| Power supply | 230V - 50/80 Hz (EK723)<br>24 V AC/DC (EK724) |
| Opening time from 0 to 100% | 3.5 min (EK723)<br>4.5 min (EK724) |
| Adjustment force | 125 Nm |
| Power | 2.5 W (EK723)<br>3 W (EK724) |
| Protection degree | IP54 |
| Operating temperature | 0°C to +50°C |
| Dimensions | 64 x 42 x 50 mm |

| Design | Order no. | PU |
|---|---|---|
| 230 V | **EK723** | 1 |
| 24 V AC/DC | **EK724** | 1 |



### Valve adapter set

| Design | Order no. | PU |
|---|---|---|
| Danfoss/Giacomini, M28x1.5 | **EK072** | 1 |

## Analogue actuators



### Din rail analogue actuator 4-gang

| | |
|---|---|
| Operating voltage over bus | 21 ... 32 V= |
| Auxiliary voltage | 24 V~ |
| Frequency | 50/60 Hz |
| Output load voltage | > 1 kΩ |
| Voltage, outputs | 0 ... 1; 0 ... 10 V |
| Output current per channel | max. 20 mA |
| Current consumption | max. 170 mA |
| Outputs current | 0 ... 20, 4 ... 20 mA |
| Output load current | < 500 Ω |
| Forced controls (1-bit objects) | per channel 2 |
| Operating temperature | -5 ... +45 °C |
| Assembling height as from DIN rail | 63 mm |
| Dimensions (W x H x D) | 72 x 90 x 70 mm |
| Width of rail mounted device (RMD) | 4 TE |

The analogue actuator receives KNX telegrams and converts them into current and/or voltage signals, e.g. for heating, air conditioning and ventilation systems.
Output signals according to DIN IEC 381

- with green/red status LED (operation/fault)
- with red programming LED
- channels can be adjusted independently
- with programming button
- expandable with 4gang analogue actuator module
- bus connection via connecting terminal
- initial status via status- and/or switch object evaluable
- with 4 independant analogue outputs
- cyclic supervision of the outputs
- with screw terminals
- with system interface for analogue actuator module

| Suitable for | Order no. | Page |
|---|---|---|
| rail din power supply 24 V AC | ST312 | 140 |
| **optional** | | |
| 4-channel analogue actuator module | TYF684E | 137 |

| Design | Order no. | PU |
|---|---|---|
| light grey | **TYF684** | 1 |



### 4-channel analogue actuator module

| | |
|---|---|
| Operating voltage over bus | 21 ... 32 V= |
| Auxiliary voltage | 24 V~ |
| Frequency | 50/60 Hz |
| Output load voltage | > 1 kΩ |
| Voltage, outputs | 0 ... 1; 0 ... 10 V |
| Output current per channel | max. 20 mA |
| Current consumption | max. 170 mA |
| Outputs current | 0 ... 20, 4 ... 20 mA |
| Output load current | < 500 Ω |
| Forced controls (1-bit objects) | per channel 2 |
| Operating temperature | -5 ... +45 °C |
| Assembling height as from DIN rail | 63 mm |
| Dimensions (W x H x D) | 72 x 90 x 70 mm |
| Width of rail mounted device (RMD) | 4 TE |

Output signals according to DIN IEC 381

- with 4 yellow output status LEDs
- with green/red status LED (operation/fault)
- as extension for analogue actuator 4gang
- with 4 independant analogue outputs
- cyclic supervision of the outputs
- with screw terminals
- with system plug for connection to the analogue actuator system interface

| Suitable for | Order no. | Page |
|---|---|---|
| Din rail analogue actuator 4-gang | TYF684 | 137 |

| Design | Order no. | PU |
|---|---|---|
| light grey | **TYF684E** | 1 |

## Actuators, flush/surface-mounted



### Heating actuator 230 V flush-mounted

| | |
|---|---|
| Operating voltage | 21 ... 32 V= |
| Switching current for electronic outputs | max. 25 mA |
| Actuators per channel | max. 2 |
| Operating temperature | -5 ... +45 °C |
| Load cable length | ≈ 20 cm with 2 x 1,5 mm² |
| Cable length, bus + inputs (extendable to max. 5 m) | ≈ 33 cm |
| Dimensions (Ø x H) | 53 x 28 mm |

Optimised for commissioning with ETS3 from version D, patch A.

- binary input functions: Switching, dimming, shutter control and value transmitter
- for individual single room temperature control
- for continuous (PI) or switched (2-point) control
- with programming button and red programming LED
- 1 electronic output (triac) for connection of 230V thermoelectric actuator drives
- with 3 independent binary inputs for potential-free contacts
- with emergency programme, e.g. for sensor or bus failure
- installation in flush-mounted or splash-protected junction box
- pre-assembled, with cables

| Design | Order no. | PU |
|---|---|---|
| light grey | **TYB641A** | 1 |



**Window interface / flush-mounted**

| | |
|---|---|
| Rated voltage KNX | DC 21 V ... 32 V SELV |
| Switching current | 5 ... 25 mA |
| Motors 230 V | 600 VA |
| Rated voltage | 230 / 240 V ~ |
| Number of drives per output | max. 2 |
| Operating temperature | -5 to +45°C |
| Dimensions | Ø 53 × 28 mm |

- control of Venetian blinds, awnings and similar blinds
- control of electrothermal actuators
- three binary inputs for potential-free contacts, usable as extension inputs for local operation
- supply via bus, no additional power supply necessary

| Design | Order no. | PU |
|---|---|---|
| Window interface / flush-mounted | **TYB692C** | 1 |



**Heating actuator 6 channels**

| | |
|---|---|
| Supply voltage | 230V AC |
| Bus KNX | 30V DC TBTS |
| Max. power uptake | 50W |
| Bus power consumption | < 10mA |
| Standard fuse | T 2A |
| Max. number of actuators | 13 |
| Operating temperature | -5 to +40 °C |
| Dimensions (W x H x D) | 302 x 75 x 70 mm |
| Frequency | 50/60 Hz |

- for valve drives 24 V, closed in de-energized state
- with on red heat request LED per channel
- with green operation LED and red programming LED
- with red fuse LED
- with integral transformer
- bus connection via connecting terminal
- with emergency programme, e.g. for sensor or bus failure
- short-circuit and overload proof (fine-wire fuse)
- with plug-in terminals
- for individual single room temperature control
- for continuous (PI) or switched (2-point) control

| Design | Order no. | PU |
|---|---|---|
| grey, 6-gang Triac | **TX206H** | 1 |

## Room actuator



**4-gang room actuator**

| | |
|---|---|
| KNX supply | 21...32 V DC |
| KNX power consumption | max. 150 mW |
| Rated voltage | 230/240 V |
| Mains frequency | 50/60 Hz |
| Heat dissipation | max. 6 W |
| Width | 4 modules |
| Operating temperature | -5°C to +45°C |
| Connections | 0.5 to 4 mm² (single-wire)<br>0.35 to 4 mm² (standed wire without ferrule)<br>0.14 to 2.5 mm² (standed wire with ferrule) |

- switching of electrical consumers AC 230 V with potential-free contacts
- switching of electrically operated blinds, shutters, awnings and similar curtains
- heating outputs: electronic outputs for switching electro-thermal adjustment drives
- installation on DIN rails in small distribution boards

| Design | Order no. | PU |
|---|---|---|
| light grey | **TYF646M** | 1 |

## Power supplies

- With integral choke
- Short-circuit and overload protection
- The “OK” indicator lights up in normal working mode
- The “I>Imax” indicator lights up, eliminate the origin of the fault (short circuit or overload)
- Protected earth conductor must be connected
- quickconnect terminal



### Power supply 320 mA RMD

| | |
|---|---|
| Supply voltage | 230V AC 50/60 Hz |
| Output voltage | 30V DC |
| Output current max. | 320 mA |
| Absorbed power | 15 VA |
| Width | 4 modules |
| Operating temperature | -5 ... +45°C |
| Connections | quickconnect 0.75 to 2.5 mm² |

| Design | Order no. | PU |
|---|---|---|
| light grey | **TXA111** | 1 |



### Power supply 640 mA RMD

| | |
|---|---|
| Supply voltage | 230V AC 50/60 Hz |
| Output voltage | 30V DC |
| Output current max. | 640 mA |
| Absorbed power | 24 VA |
| Width | 4 modules |
| Operating temperature | -5 ... +45°C |
| Connections | quickconnect 0.75 to 2.5 mm² |

| Design | Order no. | PU |
|---|---|---|
| light grey | **TXA112** | 1 |



### Power supply 1x30V, 320 mA + 1x24V, 640 mA RMD

| | |
|---|---|
| Supply voltage | 230V AC 50/60 Hz |
| Output voltage | 30V DC and 24 V DC |
| Output current max. | 320 mA and 640 mA |
| Absorbed power | 4.4 W |
| Width | 4 modules |
| Operating temperature | -5 ... +45°C |
| Connections | quickconnect 0.75 to 2.5 mm² |

| Suitable for | Order no. | Page |
|---|---|---|
| KNX weather station | TG053A | 116 |
| KNX thermostat | 8044 01 00 | 33 |
| KNX room controller | 8066 01 00 | 34 |
| Router IP/KNX | TH210 | 141 |

| Design | Order no. | PU |
|---|---|---|
| light grey | **TXA114** | 1 |



### Power supply 2x30V, 320 mA RMD

| | |
|---|---|
| Supply voltage | 230V AC 50/60 Hz |
| Output voltage | 30V DC |
| Output current max. | 2 x 30 V DC 320 mA |
| Absorbed power | 3.5 W |
| Width | 4 modules |
| Operating temperature | -5 ... +45°C |
| Connections | quickconnect 0.75 to 2.5 mm² |

- Power supply has 2 outputs KNX 30 V DC 320 mA

| Design | Order no. | PU |
|---|---|---|
| light grey | **TXA116** | 1 |



### Electrical power supply 24 V DC RMD

| | |
|---|---|
| Operating voltage | 230 V~ |
| Frequency | 50/60 Hz |
| Output voltage | 24 V= |
| Output current | max. 1 A |
| Current consumption | < 150 mA |
| Power consumption | 36 W |
| Operating temperature | + 0 ... + 45 °C |
| Width of rail mounted device (RMD) | 4 modules |

– with quickconnect plug-in terminals

| Suitable for | Order no. | Page |
|---|---|---|
| Glass sensors comfort | | 89 |
| Touch sensors with thermostat | | 105 |
| Glass sensors with thermostat | | 91 |
| Touch panel | WDI... | 150 |
| domovea server incl. software | TJA450 | 148 |
| KNX weather station | TG053A | 116 |
| output device for 4 shutters and / or blinds | TYA624D | 133 |
| Output device for 4 shutters a24V DC | TYA624B | 133 |
| 3-channel LED controller - voltage controlled | TYB673A | 131 |
| 3-channel LED controller - current controlled | TYB673B | 131 |
| KNX thermostat | 8044 01 00 | 33 |
| KNX room controller | 8066 01 00 | 34 |
| Router IP/KNX | TH210 | 141 |
| IP/KNX interface | TYF120 | 141 |
| Din rail analogue actuator 4gang | TYF784 | 117 |

| Design | Order no. | PU |
|---|---|---|
| light grey matt | **TGA200** | 1 |



### Safety transformer

| | |
|---|---|
| Supply voltage | 230V AC 50/60 Hz |
| Nominal power | 25 VA |
| Galvanic insulation | 4 kV |
| Width | 4 modules |
| Max. operating temperature | +35°C |

These transformers are designed to ensure personal safety, their primary winding are electrically separated from their secondary windings and they are intended to feed safety extra low voltage circuits U ≤ 50V. A thermal overload, in the primary windings, ensures that if a short circuit or an overload occurs in the output it will not damage the device.

| Suitable for | Order no. | Page |
|---|---|---|
| Analogue input 4gang RMD | TYF784 | 117 |
| KNX weather station | TG053A | 116 |
| Router IP/KNX | TH210 | 141 |
| IP/KNX interface | TYF120 | 141 |

| Design | Order no. | PU |
|---|---|---|
| light grey | **ST312** | 1 |

## Couplers



### Line coupler

| | |
|---|---|
| Operating voltage | 21 - 32 V DC |
| Width | 2 modules |
| Operating temperature | -5 ... +45°C |

- can be used as line/area coupler or line amplifier.
- with programming button.
- with green operation LED, red programming LED and red diagnosis LED.
- with 2 yellow data traffic LEDs for higher and lower ranking line.
- allows extension of a wire line and repeats the messages.
- ensures a galvanic insulation between lines.
- necessary in case of systems with more than 64 wire products.
- line connection via connecting terminal

| Design | Order no. | PU |
|---|---|---|
| light grey | **TYF130** | 1 |



### Router IP/KNX

| | |
|---|---|
| Supply voltage | KNX bus (21 -30V DC) |
| External SELV power | 24V AC/DC (12-30V AC/DC) |
| Supply: | 1.6 GHz |
| - power usage from the bus line | 10mA max 30V DC |
| - power usage from the auxiliary power supply | 800mW max (25mA - 24V DC) |
| Operating temperature | -5°C to 45°C |
| Width | 2 modules |

- quick communication of lines/areas and systems via data networks (Internet protocols).
- needed for operation a power supply of 24 V DC.
- as interface to PCs and data processing devices.
- for reporting bus voltage failure via data networks.
- internet protocols supported: ARP, ICMP, IGMP, UDP/IP, and DHCP.
- IP according to Konnex specifications: Core, Routing, Tunneling, Device Management.
- can be used as line/area coupler.
- with RJ45 connection for Ethernet/IP networks.
- with programming button and red programming LED.
- with green operation LED and yellow data traffic LED.
- with green, yellow and red LEDs for indicating the IP communication.
- line connection via connecting terminal.
- operating voltage connection via connecting terminal.

| Design | Order no. | PU |
|---|---|---|
| Router IP/KNX | **TH210** | 1 |



### IP/KNX interface

| | |
|---|---|
| Supply voltage | KNX bus (21 -30V DC) |
| External SELV power | 12 - 24V AC; 12 - 30V DC or PoE: Power over Ethernet DC 48V (acc. to IEEE 802.3af) |
| Operating temperature | +5°C to 45°C |
| Width | 2 modules |

- LED for operation (green) and data transmission on bus line (yellow).
- green/yellow/red LED for IP communication status
- the connection to the KNX bus is established using a standard bus connection terminal.
- ethernet / IP network: RJ45

Interface IP/KNX TYF120 is a modular device which can be installed in consumer units. It uses the KNXnet/IP standard and acts as an interface between KNX lines and data networks using Internet Protocol (IP).

| Design | Order no. | PU |
|---|---|---|
| IP/KNX interface | **TYF120** | 1 |

## Data interfaces

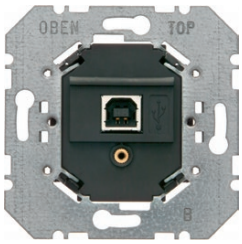


### Modular USB interface

| | |
|---|---|
| Operating voltage | 21 - 32 V DC |
| Data transfer rate | max. 9.6 kBaud |
| Operating temperature | -25 to +45°C |
| Width | 2 modules |

- for addressing, programming and diagnosis of KNX components.
- with B-type USB socket for data traffic (voltage supply via PC)
- compatible with USB 1.1/2.0 transmission protocols.
- with flash-controller technology

| Design | Order no. | PU |
|---|---|---|
| light grey | **TH101** | 1 |




### KNX data interface USB flush-mounted

| | |
|---|---|
| Operating voltage over bus | 21 ... 32 V= |
| Data transmission rate | max. 9.6 kBd |
| Operating temperature | -5 ... +45 °C |
| USB cable length | max. 5 m |

For connection of a PC for addressing, programming and diagnosis of KNX components and for visualisation.

- programmable from ETS3, V1.0
- for addressing, programming and diagnosis of KNX components
- with B-type USB socket for data traffic (voltage supply via PC)
- compatible with USB 1.1/2.0 transmission protocols
- system requirements: Windows 2000 or later
- without spreader claws
- with flash-controller technology

| Design | Order no. | PU |
|---|---|---|
| black | **7504 00 04** | 1 |



### Centre plate with TAE cut-out

| Suitable for | Order no. | Page |
|---|---|---|
| KNX data interface USB flush-mounted | 7504 00 04 | 142 |

| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **1033 89 12** | 10 |
| polar white glossy | **1033 89 19** | 10 |
| polar white matt, with 2 knock out openings | **1033 19 09** | 10 |
| anthracite matt, with 2 knock out openings | **1033 16 06** | 10 |
| aluminium matt, lacquered, with 2 knock out openings | **1033 14 04** | 10 |



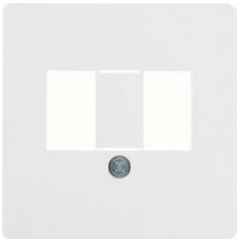
| | | |
|---|---|---|
| **Berker Q.1/Q.3** | | |
| polar white velvety | **1033 60 89** | 10 |
| anthracite velvety, lacquered | **1033 60 86** | 10 |
| aluminium velvety, lacquered | **1033 60 84** | 10 |



| | | |
|---|---|---|
| **Berker K.1/K.5** | | |
| polar white glossy | **1035 70 09** | 10 |
| anthracite matt, lacquered | **1035 70 06** | 10 |
| Aluminium, aluminium anodised | **1035 70 03** | 10 |
| Stainless steel, metal matt finish | **1035 70 04** | 10 |



| | | |
|---|---|---|
| **Berker R.1/R.3** | | |
| polar white glossy | **1038 20 89** | 10 |
| black glossy | **1038 20 45** | 10 |



## Centre plate with TAE cut-out, push-out

Only to be associated with appropriated intermediate rings.

- breakable cut-out
- possibility to insert a label with the appropriate intermediate ring

| Suitable for | Order no. | Page |
|---|---|---|
| KNX data interface USB flush-mounted | 7504 00 04 | 142 |
| Intermediate ring for central plate | | 143 |

| Design | Order no. | PU |
|---|---|---|
| white glossy | **1458 02** | 10 |
| polar white glossy | **1458 09** | 10 |
| brown glossy | **1458 01** | 10 |



## Centre plate with TDO cut-out

| Suitable for | Order no. | Page |
|---|---|---|
| KNX data interface USB flush-mounted | 7504 00 04 | 142 |







| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **68 1033 89 82** | 10 |
| polar white glossy | **68 1033 89 89** | 10 |
| polar white matt | **68 1033 19 09** | 10 |
| anthracite matt | **68 1033 16 06** | 10 |
| aluminium matt, lacquered | **68 1033 14 04** | 10 |
| **Berker Q.1/Q.3** | | |
| polar white velvety | **68 1033 60 89** | 10 |
| anthracite velvety, lacquered | **68 1033 60 86** | 10 |
| aluminium velvety, lacquered | **68 1033 60 84** | 10 |
| **Berker K.1/K.5** | | |
| polar white glossy | **68 1034 70 09** | 10 |
| anthracite matt, lacquered | **68 1034 70 06** | 10 |
| aluminium, aluminium anodised | **68 1034 70 03** | 10 |
| stainless steel, metal matt finish | **68 1034 70 04** | 10 |
| **Berker R.1/R.3** | | |
| polar white glossy | **68 1033 20 89** | 10 |
| black glossy | **68 1033 20 45** | 10 |



## Intermediate rings for central plate

| Suitable for | Order no. | Page |
|---|---|---|
| Centre plate with TAE cut-out, push-out | 1458 0. | 143 |





| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **1109 89 82** | 10 |
| polar white glossy | **1109 89 89** | 10 |
| polar white matt | **1109 19 09** | 10 |
| anthracite matt | **1109 16 06** | 10 |
| aluminium matt, lacquered | **1109 14 04** | 10 |
| **Berker Q.1/Q.3** | | |
| polar white velvety | **1109 60 82** | 10 |
| anthracite velvety, lacquered | **1109 60 86** | 10 |
| aluminium velvety, lacquered | **1109 60 84** | 10 |
| **Berker K.1/K.5** | | |
| polar white glossy | **1108 70 09** | 10 |
| anthracite matt, lacquered | **1108 70 06** | 10 |
| aluminium, aluminium anodised | **1108 70 03** | 10 |
| stainless steel, metal matt finish | **1108 70 04** | 10 |

## Accessories



### Connecting terminal

| | | |
|---|---|---|
| Operating temperature | -5 ... +45 °C | – 2pole |
| Conductor Ø | 0.6 ... 0.8 mm | – for the bus connection of the units |
| Number of conductors | 2 x 4 | – can be used as branch terminal |
| Dimensions (L x W x H) | 10.2 x 11.5 x 10 mm | – with plug-in terminals |

| Design | Order no. | PU |
|---|---|---|
| red/black | **TG008** | 50 |
| yellow/white | **TG025** | 50 |



### KNX bus cable

Bus cable (ST) Y 2 x 2 x 0.8mm
(4KV test voltage)

| Design | Order no. | PU |
|---|---|---|
| length 100 m | **TG018** | 1 |
| length 500 m | **TG019** | 1 |
| length 100 m without halogen | **TG060** | 1 |
| length 500 m without halogen | **TG061** | 1 |



### quickconnect jumpers for KNX

quickconnect jumpers for the tebis KNX system
for looping

| Design | Order no. | PU |
|---|---|---|
| black | **TG200A** | 50 |
| grey | **TG200B** | 50 |
| brown | **TG200C** | 50 |



### KNX surge protection device

| | |
|---|---|
| Nominal voltage | 24 V |
| Nominal current (max.) | 3 A |
| Nominal discharge current | 5 kA |
| Limiting discharge | 8 kA |
| Protection level at 100 V / S | ≤ 350 V |
| Protection level at 1 kV / S | ≤ 500 V |
| Response time | ≤ 100 ms |
| Insulation resistance | > 10,000 MΩ |
| Capacity | 1 pF |
| Operating temperature | -25 to +80°C |
| Bus connection | line Ø 0.8 mm, length 200 m |
| Ground connection | conductor 0.75 mm2, length 200 m |

- The application is recommended if:
  - The bus line is laid parallel to high-performance power lines,
  - The bus line is routed in parallel to metal installation parts that can flow through the lightning currents,
  - The bus line is used building border.

| Design | Order no. | PU |
|---|---|---|
| blue | **TG029** | 1 |

### Kit interface USB/KNX

| | |
|---|---|
| Operating voltage | 21 - 32 V DC |
| Data transfer rate | max. 9.6 kBaud |
| Operating temperature | -25 to +45°C |
| USB cable length | max. 3 m |
| Width | 2 modules |

- for addressing, programming and diagnosis of KNX components.
- with B-type USB socket for data traffic (voltage supply via PC)
- compatible with USB 1.1/2.0 transmission protocols.
- with flash-controller technology
- for connection of a PC for addressing, programming and diagnosis of instabus components to Modular USB interface

| Design | Order no. | PU |
|---|---|---|
| light grey | **TH102** | 1 |



### USB cable

| | |
|---|---|
| Cable length | max. 3 m |

- for connection of a PC for addressing, programming and diagnosis of instabus components to Modular USB interface

| Design | Order no. | PU |
|---|---|---|
| light grey | **TH103** | 1 |

# KNX remote control and visualisation

Intuitive control: one interface to manage your home.
domovea is the dashboard for your home, providing you with intuitive control of the different devices in your home. Lights, shutters, heating, air conditioning or alarm system; for each room or the full floor... It's so simple to use: everything can be controlled from one single point.
You can enjoy domovea from your home computer, laptop, smartphone, tablet or dedicated touch panel, all with the same look & feel.



# 07

Page


| | |
|---|---|
| domovea | 148 |
| Touch panels | 150 |
| Operating panels | 155 |

## domovea



### domovea server incl. software

| | |
|---|---|
| Operating voltage over bus | 21 ... 32 V= |
| Auxiliary voltage | 24 V= |
| Current consumption (operation) | ≈ 150 mA |
| Power consumption (operation) | ≈ 1.5 W |
| RAM | 128 MB |
| Graphics memory | ≈ 20 MB |
| Processor | 400 MHz |
| Operating temperature | +0 ... +45 °C |
| Width of rail mounted device (RMD) | 6 TE |

Central operating and visualisation unit for KNX installations via client software.

Knowledge of the relevant network technology is required for installation.

System requirements: Windows XP, VISTA and Windows 7 (32 or 64-bit).

- user interface can be configured individually for each room with special background images
- creation of max. 50 sequences from different actions
- for control and visualisation of e.g.shutters, lights, heating, ventilation, alarm system, sensors
- with status LEDs for LAN status, operational stand-by and connection status to web portal
- KNX server to supply up to 30 visualisation clients simultaneously with KNX data
- creation of light scenes
- creation of measured value archives and energy consumption visualisation with KNX energy meters
- configuration tool for installation of IP settings and parameterisations
- with configuration and client software on USB stick
- managing up to 30 users with different access rights
- software update via USB interface on the device
- integration of max. 10 network cameras
- RJ45 Port for LAN connection
- bus connection via connecting terminal
- with plug-in terminals

| Suitable for | Order no. | Page |
|---|---|---|
| Touch panel | WDI... | 150 |
| **Optional** | | |
| Electrical power supply 24 V DC RMD | TGA200 | 140 |

| Design | Order no. | PU |
|---|---|---|
| light grey matt | **TJA450** | 1 |



### domovea software server with USB/KNX interface

| | |
|---|---|
| Operating voltage interface via bus | 21 ... 32 V= |
| RAM | 128 MB |
| Graphics resolution | min. 1024 x 768 px |
| Free hard disk space | min. 500 MB |

Central operating and visualisation software for operation via client software.

Knowledge of the relevant network technology is required for installation.

System requirements: Windows XP, VISTA and Windows 7 (32 or 64-bit).

- user interface can be configured individually for each room with special background images
- creation of max. 50 sequences from different actions
- for control and visualisation of e.g.shutters, lights, heating, ventilation, alarm system, sensors
- KNX server to supply up to 30 visualisation clients simultaneously with KNX data
- creation of light scenes
- creation of measured value archives and energy consumption visualisation with KNX energy meters
- configuration tool for installation of IP settings and parameterisations
- with configuration and client software on USB stick
- managing up to 30 users with different access rights
- integration of max. 10 network cameras
- processor min. 600 MHz
- with USB interface for connecting to the bus
- with connecting cable

| Design | Order no. | PU |
|---|---|---|
| domovea server software with USB adapter | **TJ701A** | 1 |



### Power supply 24 V DC 1A

| | |
|---|---|
| Operating voltage | 230 V~ |
| Frequency | 50/60 Hz |
| Output voltage | 24 V= |
| Output current | max. 1 A |
| Current consumption | < 150 mA |
| Power consumption | 36 W |
| Operating temperature | +0 ... +45 °C |
| Width of rail mounted device (RMD) | 4 TE |

– with quickconnect plug-in terminals

| Suitable for | Order no. | Page |
|---|---|---|
| Glass sensors comfort | | 89 |
| Touch sensors with thermostat | | 105 |
| Glass sensors with thermostat | | 91 |
| Touch panel | WDI... | 150 |
| domovea server incl. software | TJA450 | 148 |
| KNX weather station | TG053A | 116 |
| output device for 4 shutters and / or blinds | TYA624D | 133 |
| Output device for 4 shutters a24V DC | TYA624B | 133 |
| 3-channel LED controller - voltage controlled | TYB673A | 131 |
| 3-channel LED controller - current controlled | TYB673B | 131 |
| KNX thermostat | 8044 01 00 | 33 |
| KNX room controller | 8066 01 00 | 34 |
| Router IP/KNX | TH210 | 141 |
| IP/KNX interface | TYF120 | 141 |
| Din rail analogue actuator 4gang | TYF784 | 117 |

| Design | Order no. | PU |
|---|---|---|
| light grey matt | **TGA200** | 1 |



### domovea system package

Knowledge of the relevant network technology is required for installation.

Set consisting of:
- domovea server incl. software, order no. TJA450
- Power supply 24 V DC 1A, order no. TGA200

| Suitable for | Order no. | Page |
|---|---|---|
| Touch panel | WDI... | 150 |

| Design | Order no. | PU |
|---|---|---|
| domovea set | **TJA451** | 1 |

## Touch panels



### Touch panel 7" Android

| | |
|---|---|
| Power over Ethernet (PoE) | 18 ... 48 V= |
| Auxiliary voltage | 18 ... 48 V= |
| Power consumption | < 10 W |
| TFT screen size | 7" |
| Light intensity | 300 cd/m² |
| Transmission rate Ethernet | max. 10/100 Mbit/s |
| Processor | 1 GHz |
| RAM | 512 MB |
| Operating temperature | + 5 ... + 45 °C |
| Dimensions (W x H x D) | 189.7 x 125.7 x 48.3 mm |
| Assembling height | 12 mm |

PoE power supply according to IEEE 802.3af Class 3 possible without audio applications.

- for display of preconfigured functions, measured values and data
- suitable for vertical and horizontal domovea visualisation
- depending on the software visualisation one and two surface operation, stepless configuration based on sliding and page scrolling by swiping are supported
- multi-touch function for the connection of multiple actions, e.g. to activate a function with simultaneous setting of a function value
- display illumination can be switched on automatically using brightness sensor
- connection to KNX system possible via a local server e.g. the domovea server
- external applications (Apps) available in preinstalled Android launcher
- integration of door communication functions in the domovea client or Elcom VideoFON client
- silent, long-lasting convection cooling without fan
- RJ45 Port for LAN connection
- card slot with 8 GB SDHC card
- microphone and loudspeaker with echo suppression
- with USB/Mini USB type A adapter cable
- with RJ45 connector kit from connector and patch cable
- mini-USB 2.0 jack e.g. for external storage media or updates on the upper display edge is accessible without dismantling
- 2 USB 2.0 connections on the rear
- for flush mounting and hollow-wall mounting
- for vertical and horizontal mounting

| **Suitable for** | **Order no.** | **Page** |
|---|---|---|
| Housing flush-mounted for WDI07x | WDW070 | 153 |
| Housing flush-mounted for WDI07x, flush-to-wall | WDW071 | 154 |
| **optional** | | |
| Electrical power supply 24 V DC | TGA200 | 140 |
| domovea Server incl. software | TJA450 | 148 |
| domovea system package | TJA451 | 149 |

| Design | Order no. | PU |
|---|---|---|
| anthracite, 7" | **WDI070** | 1 |



**Touch panel 10" Android**

| | |
|---|---|
| Power over Ethernet (PoE) | 18 ... 48 V= |
| Auxiliary voltage | 18 ... 48 V= |
| Power consumption | < 10 W |
| TFT screen size | 10" |
| Light intensity | 300 cd/m² |
| Transmission rate Ethernet | max. 10/100 Mbit/s |
| Processor | 1 GHz |
| RAM | 512 MB |
| Operating temperature | + 5 ... + 45 °C |
| Dimensions (W x H x D) | 259.4 x 177 x 67.5 mm |
| Assembling height | 10 mm |

PoE power supply according to IEEE 802.3af Class 3 possible without audio applications.

- for display of preconfigured functions, measured values and data
- suitable for horizontal domovea visualisation
- depending on the software visualisation one and two surface operation, stepless configuration based on sliding and page scrolling by swiping are supported
- multi-touch function for the connection of multiple actions, e.g. to activate a function with simultaneous setting of a function value
- display illumination can be switched on automatically using brightness sensor
- connection to KNX system possible via a local server e.g. the domovea server
- external applications (Apps) available in preinstalled Android launcher
- integration of door communication functions in the domovea client or Elcom VideoFON client
- silent, long-lasting convection cooling without fan
- RJ45 Port for LAN connection
- card slot with 8 GB SDHC card
- microphone and loudspeaker with echo suppression
- with USB/Mini USB type A adapter cable
- with RJ45 connector kit from connector and patch cable
- mini-USB 2.0 jack e.g. for external storage media or updates on the upper display edge is accessible without dismantling
- 2 USB 2.0 connections on the rear
- for flush mounting and hollow-wall mounting
- for horizontal mounting

| **Suitable for** | **Order no.** | **Page** |
|---|---|---|
| Housing flush-mounted for WDI10x | WDW100 | 153 |
| Housing flush-mounted for WDI10x, flush-to-wall | WDW101 | 154 |
| **optional** | | |
| Electrical power supply 24 V DC | TGA200 | 140 |
| domovea Server incl. software | TJA450 | 148 |
| domovea system package | TJA451 | 149 |

| Design | Order no. | PU |
|---|---|---|
| anthracite, 10" | **WDI100** | 1 |



**Touch panel 10" Windows**

| | |
|---|---|
| Auxiliary voltage | 24 V= |
| Power consumption | max. 20 W |
| TFT screen size | 10" |
| Light intensity | 300 cd/m² |
| Transmission rate Ethernet | max. 1000 Mbit/s |
| Processor | 2 x 1 GHz |
| RAM | 2 GB |
| Operating temperature | + 5 ... + 35 °C |
| Dimensions (W x H x D) | 259.4 x 177 x 67.5 mm |
| Assembling height | 10 mm |

PoE power supply according to IEEE 802.3af Class 3 possible without audio applications.

- for display of preconfigured functions, measured values and data
- signal and operating panel with touch-sensitive TFT colour display in 16:9 format
- suitable for horizontal domovea visualisation
- depending on the software visualisation one and two surface operation, stepless configuration based on sliding and page scrolling by swiping are supported
- multi-touch function for the connection of multiple actions, e.g. to activate a function with simultaneous setting of a function value
- disabling function for cleaning the user interface
- display illumination can be switched on automatically using brightness sensor
- connection to KNX system possible via a local server e.g. the domovea server
- visualisation for Berker IP-Control via browser
- integrated PC with Windows embadded operating system
- integration of door communication functions in the Elcom VideoFON client
- silent, long-lasting convection cooling without fan
- 2 RJ45 Ports for LAN connection
- internal memory of 64 GB SSD present
- microphone and loudspeaker with echo suppression
- with USB/Mini USB type A adapter cable
- with RJ45 connector kit from connector and patch cable
- mini-USB 2.0 jack e.g. for external storage media or updates on the upper display edge is accessible without dismantling
- 2 USB 2.0 connections on the rear
- additional connection for Serial RS232
- RJ45 cable in scope of delivery
- for flush mounting and hollow-wall mounting
- for horizontal mounting

| **Suitable for** | **Order no.** | **Page** |
|---|---|---|
| Housing flush-mounted for WDI10x | WDW100 | 153 |
| Housing flush-mounted for WDI10x, flush-to-wall | WDW101 | 154 |
| **optional** | | |
| Electrical power supply 24 V DC | TGA200 | 140 |
| domovea Server incl. software | TJA450 | 148 |
| domovea system package | TJA451 | 149 |

| Design | Order no. | PU |
|---|---|---|
| anthracite, 10" | **WDI101** | 1 |



## Touch panel 16" Windows

| | |
|---|---|
| Auxiliary voltage | 24 V= |
| Power consumption | max. 20 W |
| TFT screen size | 16" |
| Light intensity | 220 cd/m² |
| Transmission rate Ethernet | max. 1000 Mbit/s |
| Processor | 2 x 1 GHz |
| RAM | 2 GB |
| Operating temperature | + 5 ... + 35 °C |
| Dimensions (W x H x D) | 377.4 x 231.8 x 66.4 mm |
| Assembling height | 11 mm |

PoE power supply according to IEEE 802.3af Class 3 possible without audio applications.

- for display of preconfigured functions, measured values and data
- signal and operating panel with touch-sensitive TFT colour display in 16:9 format
- suitable for horizontal domovea visualisation
- depending on the software visualisation one and two surface operation, stepless configuration based on sliding and page scrolling by swiping are supported
- multi-touch function for the connection of multiple actions, e.g. to activate a function with simultaneous setting of a function value
- disabling function for cleaning the user interface
- display illumination can be switched on automatically using brightness sensor
- connection to KNX system possible via a local server e.g. the domovea server
- visualisation for Berker IP-Control via browser
- integrated PC with Windows embadded operating system
- integration of door communication functions in the Elcom VideoFON client
- silent, long-lasting convection cooling without fan
- 2 RJ45 Ports for LAN connection
- internal memory of 32 GB SSD present
- microphone and loudspeaker with echo suppression
- with USB/Mini USB type A adapter cable
- with RJ45 connector kit from connector and patch cable
- mini-USB 2.0 jack e.g. for external storage media or updates on the upper display edge is accessible without dismantling
- 2 USB 2.0 connections on the rear
- additional connection for Serial RS232
- RJ45 cable in scope of delivery
- for flush mounting and hollow-wall mounting
- for horizontal mounting

| **Suitable for** | **Order no.** | **Page** |
|---|---|---|
| Housing flush-mounted for WDI16x | WDW160 | 153 |
| Housing flush-mounted for WDI16x, flush-to-wall | WDW161 | 154 |
| **optional** | | |
| Electrical power supply 24 V DC | TGA200 | 140 |
| domovea Server incl. software | TJA450 | 148 |
| domovea system package | TJA451 | 149 |

| Design | Order no. | PU |
|---|---|---|
| anthracite, 16" | **WDI161** | 1 |




## Flush-mounted housing

- for installation of a Touch panel
- with cleaning cover
- for flush mounting and hollow-wall mounting
- for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| Housing flush-mounted for WDI07x, anthracite, lacquered [1] | **WDW070** | 1 |
| Housing flush-mounted for WDI10x, anthracite, lacquered [2] | **WDW100** | 1 |
| Housing flush-mounted for WDI16x, anthracite, lacquered [3] | **WDW160** | 1 |

[1] Dimensions (W x H x D): 190 x 126 x 47 mm, cavity wall opening (W x H x D): 182 x 117 x 47 mm
[2] Dimensions (W x H x D): 260 x 177 x 64 mm, cavity wall opening (W x H x D): 252 x 169 x 64 mm
[3] Dimensions (W x H x D): 378 x 233 x 64 mm, cavity wall opening (W x H x D): 370 x 225 x 64 mm




## Flush-mounted housing, flush-to-wall

- for flush-to-wall installation of a Touch Panel
- with Push-to-open mechanism for comfortable mounting
- with cleaning cover
- for flush mounting and hollow-wall mounting
- for vertical and horizontal mounting

| Design | Order no. | PU |
|---|---|---|
| Housing flush-mounted for WDI07x, flush-to-wall, anthracite, lacquered [1] | **WDW071** | 1 |
| Housing flush-mounted for WDI10x, flush-to-wall, anthracite, lacquered [2] | **WDW101** | 1 |
| Housing flush-mounted for WDI16x, flush-to-wall, anthracite, lacquered [3] | **WDW161** | 1 |

[1] Dimensions (W x H x D): 197.7 x 133.6 x 74 mm, cavity wall opening (W x H x D): 197.7 x 133.6 x 74 mm
[2] Dimensions (W x H x D): 269 x 186 x 74 mm, cavity wall opening (W x H x D): 269 x 186 x 74 mm
[3] Dimensions (W x H x D): 387 x 242 x 74 mm, cavity wall opening (W x H x D): 387 x 242 x 74 mm

## Operating panels



### IP Control RMD

| | |
|---|---|
| Operating voltage | 10 ... 30 V= |
| Power consumption | 5 VA |
| receiptable addresses | 32766 |
| RAM | 256 MB |
| Operating temperature | +0 ... +35 °C |
| Assembling height as from DIN rail | 58 mm |
| Width of rail mounted device (RMD) | 8 TE |
| Dimensions (W x H x D) | 144 x 90 x 64 mm |

PRODUCT VARIANT FOR USE-INDEPENDENT ROOM CONTROL:
IP control (order no. 7571 00 36) including software, with which an assignment plan can be stored, for building services engineering control according to room/building use, e.g. in schools according to timetables or in public buildings according to visiting or working times.

Knowledge of the relevant network technology is required for installation.

Mobile devices such as iPhones/iPad, mobile phones or PDAs can be linked via the Internet.

- integrated element library with standard operating elements
- freely configurable graphic operating surface for representation on the PC monitor
- up to 20 operating configurations for different applications
- integration of external control units with JAVA support (e.g. tablet PC) via WLAN
- central operating and visualisation unit for KNX via web browser
- control of multimedia applications
- for control and visualisation of e.g.shutters, lights, heating, ventilation, alarm system, sensors
- with status LED for operational stand-by, data processing, KNX communication, LAN status
- KNX server to supply up to 15 visualisation clients with KNX data
- time updating via Internet NTP server and sending on the KNX
- creation of light scenes with up to 28 telegrams each
- central functions/scenarios for heating, shutters, illumination, etc. can be configured by end user
- remote commissioning / maintenance of KNX systems possible via the Internet
- commissioning and programming without ETS via web browser
- with week and year timer function
- configuration tool for installation of IP settings and parameterisations
- support of common web browsers (IE, Netscape, Firefox etc.)
- with event indicator for e.g. status/alarm messages via e-mail
- operation with non-choked output of KNX voltage supply possible (pay attention to current consumption)
- administration of 50 users for the control of access authorisation
- database connection to the memory of utilisation/ consumption data of the KNX
- also usable with Apple Macintosh
- with updatable Flash-Controller for subsequent function expansions
- integration of network cameras possible
- for LAN connection of individual KNX installations
- with integrated controller for logic functions (concatenations, threshold value processing)
- RJ45 Port for LAN connection
- bus connection via connecting terminal
- with screw terminals

| **Suitable for** | **Order no.** | **Page** |
|---|---|---|
| Touch panel | WDI... | 150 |

| Design | Order no. | PU |
|---|---|---|
| IP control RMD, light grey | **7571 00 04** | 1 |
| IP-Control for use-dependent room controllers RMD, light grey | **7571 00 36** | 1 |

# Berker KNX wireless components

The Berker switch ranges S.1, B.3, B.7, Q.1, Q.3, K.1, K.5, R.1 and R.3 are available in conventional and in KNX wireless technology. As suitable for new buildings as for the refitting or extension of existing installations. It is equipped with amazing functions, such as precise dimming for all kind of bulbs.



# 08

Page


| | |
|---|---|
| Light control | 160 |
| Motion detectors | 168 |
| Light sensitive switch | 174 |
| Physical sensor | 174 |
| Blind control | 175 |
| Transmitters | 177 |
| Binary inputs | 182 |
| Switch actuators | 183 |
| Micromodules | 186 |
| Blind actuators | 190 |
| Power supply | 190 |
| Unidirectional input concentrator | 191 |

**Application modules conventional**


Button 1gang

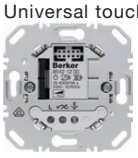

Button 2gang


Motion detector 1.1/2.2 m


IR motion detector comfort 1.1/2.2 m


Blind button


Blind-time switch

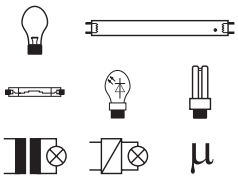
| **Inserts** | Order no. | 8514 11 xx | 8514 21 xx | 8534 11 xx<br>8534 21 xx | 8534 12 xx<br>8534 22 xx | 8524 11 xx | 8574 11 xx |
|---|---|---|---|---|---|---|---|
| Universal switch insert, 1gang  | 8512 11 00 | ■ | | ■ | ■ | | |
| Relay insert  | 8512 12 00 | ■ | | ■ | ■ | | |
| Touch dimmer (R,L)  | 8542 11 00 | ■ | | ■ | ■ | | |
| Universal touch dimmer 1gang  | 8542 12 00 | ■ | | ■ | ■ | | |
| Universal switch insert, 2gang  | 8512 22 00 | | ■ | | | | |
| Universal touch dimmer 2gang  | 8542 21 00 | | ■ | | | | |
| Blind insert comfort  | 8522 11 00 | | | | | ■ | ■ |
| Power supply for wireless application module  | 8502 01 00 | | | | | | |
| Extension unit for motion detector  | 8532 01 00 | | | ■ | ■ | | |

| Application modules KNX wireless |  KNX wireless button 1gang |  KNX wireless button 2gang |  KNX wireless button 4gang |  KNX wireless motion detector comfort 1.1/2.2 m |  KNX wireless timer |  KNX wireless blind button |  KNX wireless blind time switch |
|---|---|---|---|---|---|---|---|
| | 8514 51 xx | 8514 61 xx | 8564 81 xx | 8534 51 xx<br>8534 61 xx | 8574 52 xx | 8524 51 xx | 8574 51 xx |
| | ■ | | ■ | ■ | | | |
| | ■ | | ■ | ■ | ■ | | |
| | ■ | | ■ | ■ | | | |
| | ■ | | ■ | ■ | | | |
| | | ■ | ■ | | | | |
| | | ■ | ■ | | | | |
| | | | | | | ■ | ■ |
| | ■ | ■ | ■ | ■ | ■ | ■ | ■ |

## Light control

### Switch inserts



**Relay insert**

| | |
|---|---|
| Operating voltage | 230 V~ |
| Frequency | 50/60 Hz |
| Power consumption (standby) | < 0.3 W |
| 230 V incandescent lamps and halogen lamps | 2300 W |
| 230 V retrofit LED lamps | 440 W |
| Dimmable energy-saving lamps | 440 W |
| Fluorescent lamps: | |
| - uncompensated | 1100 VA |
| - parallel compensated | 1000 W /130 µF |
| - in Duo circuit | 1000 W |
| - with electronical ballast (EB) | 1000 W |
| Compact fluorescent lamps with electronic ballast | 22 x 20 W |
| Dimmable conventional transformers | 1500 VA |
| Electronic transformers and dual-mode transformers | 1500 W |
| Minimum contact load | ≈ 15 W |
| Operating temperature | -5 ... +45 °C |
| Number of substations | unlimited |
| Cable length, extensions | max. 50 m |
| Load cable length | max. 100 m |
| Screw terminals | max. 2 x 1,5/1 x 2,5 mm² |
| Housing installation depth | 22 mm |
| Claw guidance installation depth | 32 mm |

– low intrinsic energy requirement
– also usable as push-button relay switch
– with extension unit input for push-button (NO contact), single-surface operation and motion detector extension unit
– no conductive connection between supporting ring and spreading claws
– with screw terminals

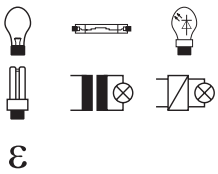
Neutral conductor necessary!

Comprehensive transmission and reception functions, in conjunction with a KNX wireless application module.



| Design | Order no. | PU |
|---|---|---|
| Relay insert | **8512 12 00** | 1 |





### Switch insert 1gang

| | |
|---|---|
| Operating voltage | 230 V~ |
| Frequency | 50/60 Hz |
| Power consumption (standby) | < 0.3 W |
| 230 V incandescent lamps and halogen lamps | 25 ... 400 W |
| Dimmable 230 V retrofit LED lamps | 5 ... 70 W |
| Dimmable energy-saving lamps | 13 ... 80 W |
| Dimmable conventional transformers | 25 ... 400 VA |
| Electronic transformers and dual-mode transformers | 25 ... 400 W |
| Operating temperature | -5 ... +45 °C |
| Number of substations | unlimited |
| Cable length, extensions | max. 50 m |
| Load cable length | max. 100 m |
| Screw terminals | max. 2 x 1,5/1 x 2,5 mm² |
| Insertion depth | 32 mm |

- low intrinsic energy requirement
- bulb-preserving soft startup
- automatic setting to dimmable loads (autoDetect process)
- short-circuit and overload proof (electronic fuse)
- optimisation of the dimming performance by fine adjustment of the load type and special adjustment mode
- with extension unit input for push-button (NO contact), single-surface operation and motion detector extension unit
- no conductive connection between supporting ring and spreading claws
- with screw terminals

**Caution!**
Only connect **dimmable** 230 V ESL or retrofit-LED lamps.

**Only suitable for operation with dimmable loads!**

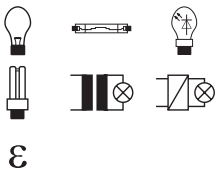
Do not connect inductive and capacitive loads jointly.

Comprehensive transmission and reception functions, in conjunction with a KNX wireless application module.



| Design | Order no. | PU |
|---|---|---|
| Switch insert 1gang | **8512 11 00** | 1 |





### Switch insert 2gang

| | |
|---|---|
| Operating voltage | 230 V~ |
| Frequency | 50/60 Hz |
| Power consumption (standby) | < 1 W |
| 230 V incandescent lamps and halogen lamps | per channel 35 ... 300 W |
| Dimmable 230 V retrofit LED lamps | per channel 12 ... 54 W |
| Dimmable energy-saving lamps | per channel 15 ... 54 W |
| Dimmable conventional transformers | per channel 35 ... 300 VA |
| Electronic transformers and dual-mode transformers | per channel 35 ... 300 W |
| Operating temperature | -5 ... +45 °C |
| Number of substations | unlimited |
| Cable length, extensions | max. per channel 50 m |
| Load cable length | max. 100 m |
| Screw terminals | max. 2 x 1,5/1 x 2,5 mm² |
| Insertion depth | 32 mm |

- low intrinsic energy requirement
- bulb-preserving soft startup
- automatic setting to dimmable loads (autoDetect process)
- short-circuit and overload proof (electronic fuse)
- optimisation of the dimming performance by fine adjustment of the load type and special adjustment mode
- with 2 extension unit inputs for push-button (NO contact), single-surface operation
- no conductive connection between supporting ring and spreading claws
- with screw terminals

**Caution!**
Only connect **dimmable** 230 V ESL or retrofit-LED lamps.

**Only suitable for operation with dimmable loads!**

Do not connect inductive and capacitive loads jointly.

Comprehensive transmission and reception functions, in conjunction with a KNX wireless application module.



| Design | Order no. | PU |
|---|---|---|
| Switch insert 2gang | **8512 22 00** | 1 |

## Dimmer inserts




### Touch dimmer (R, L)

| | |
|---|---|
| Operating voltage | 230 V~ |
| Frequency | 50/60 Hz |
| Power consumption (standby) | < 0.3 W |
| 230 V incandescent lamps and halogen lamps | 25 ... 400 W |
| Dimmable conventional transformers | 25 ... 400 VA |
| Number of universal capacity enhancers | max. 2 |
| Operating temperature | -5 ... +45 °C |
| Number of substations | unlimited |
| Cable length, extensions | max. 50 m |
| Load cable length | max. 100 m |
| Screw terminals | max. 2 x 1,5/1 x 2,5 mm² |
| Insertion depth | 32 mm |

- low intrinsic energy requirement
- switch-on brightness level can be stored safe after power failure
- bulb-preserving soft startup
- phase cut-on
- short-circuit and overload proof (electronic fuse)
- with extension unit input for push-button (NO contact) with single-surface operation and motion detector extension unit
- expandable with universal power boosters RMD Plus
- no conductive connection between supporting ring and spreading claws
- with screw terminals

Comprehensive transmission and reception functions, in conjunction with a KNX wireless application module.

| Design | Order no. | PU |
|---|---|---|
| Touch dimmer (R, L) | **8542 11 00** | 1 |




### Universal touch dimmer 1gang

| | |
|---|---|
| Operating voltage | 230 V~ |
| Frequency | 50/60 Hz |
| Power consumption (standby) | < 0.3 W |
| 230 V incandescent lamps and halogen lamps | 25 ... 400 W |
| Dimmable 230 V retrofit LED lamps | 5 ... 70 W |
| Dimmable energy-saving lamps | 13 ... 80 W |
| Dimmable conventional transformers | 25 ... 400 VA |
| Electronic transformers and dual-mode transformers | 25 ... 400 W |
| Operating temperature | -5 ... +45 °C |
| Number of substations | unlimited |
| Cable length, extensions | max. 50 m |
| Load cable length | max. 100 m |
| Screw terminals | max. 2 x 1,5/1 x 2,5 mm² |
| Insertion depth | 32 mm |

- low intrinsic energy requirement
- bulb-preserving soft startup
- automatic setting to dimmable loads (autoDetect process)
- phase cut-on or cut-off according to load type, self-learning
- short-circuit and overload proof (electronic fuse)
- optimisation of the dimming performance by fine adjustment of the load type and special adjustment mode
- with extension unit input for push-button (NO contact) with single-surface operation and motion detector extension unit
- no conductive connection between supporting ring and spreading claws
- with screw terminals

Do not connect inductive and capacitive loads jointly.

Comprehensive transmission and reception functions, in conjunction with a KNX wireless application module.

| Design | Order no. | PU |
|---|---|---|
| Universal touch dimmer 1gang | **8542 12 00** | 1 |




### Universal touch dimmer 2gang

| | |
|---|---|
| Operating voltage | 230 V~ |
| Frequency | 50/60 Hz |
| Power consumption, standby (Channel 1/Channel 2) | 0,3/0,7 W |
| 230 V incandescent lamps and halogen lamps | per channel 35 ... 300 W |
| Dimmable 230 V retrofit LED lamps | per channel 12 ... 40 W |
| Dimmable energy-saving lamps | per channel 15 ... 54 W |
| Dimmable conventional transformers | per channel 35 ... 300 VA |
| Electronic transformers and dual-mode transformers | per channel 35 ... 300 W |
| Operating temperature | -5 ... +45 °C |
| Number of substations | unlimited |
| Cable length, extensions | max. per channel 50 m |
| Load cable length | max. 100 m |
| Screw terminals | max. 2 x 1,5/1 x 2,5 mm² |
| Insertion depth | 32 mm |

Do not connect inductive and capacitive loads jointly per series.

Comprehensive transmission and reception functions, in conjunction with a KNX wireless application module.

- low intrinsic energy requirement
- bulb-preserving soft startup
- automatic setting to dimmable loads (autoDetect process)
- phase cut-on or cut-off according to load type, self-learning
- short-circuit and overload proof (electronic fuse)
- optimisation of the dimming performance by fine adjustment of the load type and special adjustment mode
- with 2 extension unit inputs for push-button (NO contact), single-surface operation
- no conductive connection between supporting ring and spreading claws
- with screw terminals

| Design | Order no. | PU |
|---|---|---|
| Universal touch dimmer 2gang | **8542 21 00** | 1 |

## KNX wireless buttons for switches/dimmers



### KNX wireless button 1gang quicklink

| | |
|---|---|
| Wireless transmission/reception frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of wireless channels | 2 |
| Number of quicklink links | max. 20 transmitter/receiver |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Operating temperature | -5 ... +45 °C |

For manual actuation or remote control via KNX wireless.

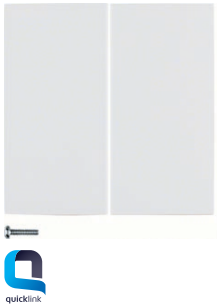
- low intrinsic energy requirement
- configurable transmission and/or reception behaviour
- reset function (to factory setting)
- quicklink functions: switching, dimming, blind, 2 scenes, time switching, NO contact push-button, memory
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: +6 scenes, 1 button control up/down, operating mode on/off, dimming value, brightness display, push-button, status display, forced control
- LED application module/insert compatibility display
- with configuration and function LEDs
- with configuration and function button
- operating areas configurable as one or two-area operation
- switch-on brightness level for each operating area on configuration with dimmer insert, power failure proof, storable
- scene saving lockable
- with anti-dismantling protection
- top and bottom operating area on 1gang switching/dimming inserts and network insert are freely configurable
- toolless quicklink configuration using buttons and LED display

| Suitable for | Order no. | Page |
|---|---|---|
| Relay insert | 8512 12 00 | 160 |
| Switch insert 1gang | 8512 11 00 | 161 |
| Touch dimmer (R, L) | 8542 11 00 | 162 |
| Universal touch dimmer 1gang | 8542 12 00 | 162 |
| Mains insert for KNX wireless application module | 8502 01 00 | 190 |

| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **8514 51 82** | 1 |
| polar white glossy | **8514 51 89** | 1 |
| polar white matt | **8514 51 88** | 1 |
| anthracite matt | **8514 51 85** | 1 |
| aluminium, matt, lacquered | **8514 51 83** | 1 |

| Design | Order no. | PU |
|---|---|---|
| **Berker Q.1/Q.3** | | |
| white velvety | **8514 51 22** | 1 |
| polar white velvety | **8514 51 29** | 1 |
| anthracite velvety, lacquered | **8514 51 26** | 1 |
| aluminium velvety, lacquered | **8514 51 24** | 1 |
| **Berker K.1/K.5** | | |
| polar white glossy | **8514 51 79** | 1 |
| anthracite matt, lacquered | **8514 51 75** | 1 |
| aluminium, matt, lacquered | **8514 51 77** | 1 |
| stainless steel matt, lacquered | **8514 51 73** | 1 |
| **Berker R.1/R.3** | | |
| polar white glossy [1] | **8514 51 39** | 1 |
| black glossy [1] | **8514 51 31** | 1 |

[1] no dismantling protection possible



### KNX wireless button 2gang quicklink

| | |
|---|---|
| Wireless transmission/reception frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of wireless channels | 4 |
| Number of quicklink links | max. 20 transmitter/receiver |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Operating temperature | -5 ... +45 °C |

For manual actuation or remote control via KNX wireless.

- low intrinsic energy requirement
- configurable transmission and/or reception behaviour
- reset function (to factory setting)
- quicklink functions: switching, dimming, blind, 2 scenes, time switching, NO contact push-button, memory
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: +6 scenes, 1 button control up/down, operating mode on/off, dimming value, brightness display, push-button, status display, forced control
- LED application module/insert compatibility display
- with configuration and function LEDs
- with configuration and function button
- operating areas configurable as one or two-area operation
- switch-on brightness level for each operating area on configuration with dimmer insert, power failure proof, storable
- scene saving lockable
- with anti-dismantling protection
- top and bottom operating areas on 2gang switching/dimming inserts and network insert are freely configurable
- toolless quicklink configuration using buttons and LED display

| Suitable for | Order no. | Page |
|---|---|---|
| Switch insert 2gang | 8512 22 00 | 161 |
| Universal touch dimmer 2gang | 8542 21 00 | 163 |
| Mains insert for KNX wireless application module | 8502 01 00 | 190 |







| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **8514 61 82** | 1 |
| polar white glossy | **8514 61 89** | 1 |
| polar white matt | **8514 61 88** | 1 |
| anthracite matt | **8514 61 85** | 1 |
| aluminium, matt, lacquered | **8514 61 83** | 1 |
| **Berker Q.1/Q.3** | | |
| white velvety | **8514 61 22** | 1 |
| polar white velvety | **8514 61 29** | 1 |
| anthracite velvety, lacquered | **8514 61 26** | 1 |
| aluminium velvety, lacquered | **8514 61 24** | 1 |
| **Berker K.1/K.5** | | |
| polar white glossy | **8514 61 79** | 1 |
| anthracite matt, lacquered | **8514 61 75** | 1 |
| aluminium, matt, lacquered | **8514 61 77** | 1 |
| stainless steel matt, lacquered | **8514 61 73** | 1 |

| Design | Order no. | PU |
|---|---|---|
| **Berker R.1/R.3** | | |
| polar white glossy [1] | **8514 61 39** | 1 |
| black glossy [1] | **8514 61 31** | 1 |

[1] no dismantling protection possible



quicklink

**KNX wireless button 4gang quicklink**

| | |
|---|---|
| Wireless transmission/reception frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of wireless channels | 4 |
| Number of quicklink links | max. 20 transmitter/receiver |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Operating temperature | -5 ... +45 °C |

Extended operating options on 1gang inserts through 2 additional, freely-configurable wireless channels.

For manual actuation or remote control via KNX wireless.

- low intrinsic energy requirement
- functions for the push-button operation areas up/down or left/right can be freely configured as receiver for controlling the connected load and as transmitter for remote control of a blind, for example
- configurable transmission and/or reception behaviour
- reset function (to factory setting)
- quicklink functions: switching, dimming, blind, 2 scenes, time switching, NO contact push-button, memory
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: +6 scenes, 1 button control up/down, operating mode on/off, dimming value, brightness display, push-button, status display, forced control
- LED application module/insert compatibility display
- with configuration and function LEDs
- with configuration and function button
- operating areas configurable as one or two-area operation
- switch-on brightness level for each operating area on configuration with dimmer insert, power failure proof, storable
- scene saving lockable
- with anti-dismantling protection
- toolless quicklink configuration using buttons and LED display

| Suitable for | Order no. | Page |
|---|---|---|
| Switch inserts | | 160, 161 |
| Dimmer inserts | | 162, 163 |
| Mains insert for KNX wireless application module | 8502 01 00 | 190 |





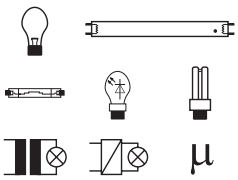




| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **8564 81 82** | 1 |
| polar white glossy | **8564 81 89** | 1 |
| polar white matt | **8564 81 88** | 1 |
| anthracite matt | **8564 81 85** | 1 |
| aluminium, matt, lacquered | **8564 81 83** | 1 |
| **Berker Q.1/Q.3** | | |
| white velvety | **8564 81 22** | 1 |
| polar white velvety | **8564 81 29** | 1 |
| anthracite velvety, lacquered | **8564 81 26** | 1 |
| aluminium velvety, lacquered | **8564 81 24** | 1 |
| **Berker K.1/K.5** | | |
| polar white glossy | **8564 81 79** | 1 |
| anthracite matt, lacquered | **8564 81 75** | 1 |
| aluminium, matt, lacquered | **8564 81 77** | 1 |
| stainless steel matt, lacquered | **8564 81 73** | 1 |
| **Berker R.1/R.3** | | |
| polar white glossy [1] | **8564 81 39** | 1 |
| black glossy [1] | **8564 81 31** | 1 |

## KNX wireless time switches



### Relay insert

| | |
|---|---|
| Operating voltage | 230 V~ |
| Frequency | 50/60 Hz |
| Power consumption (standby) | < 0.3 W |
| 230 V incandescent lamps and halogen lamps | 2300 W |
| 230 V retrofit LED lamps | 440 W |
| Dimmable energy-saving lamps | 440 W |
| Fluorescent lamps: | |
| - uncompensated | 1100 VA |
| - parallel compensated | 1000 W /130 µF |
| - in Duo circuit | 1000 W |
| - with electronical ballast (EB) | 1000 W |
| Compact fluorescent lamps with electronic ballast | 22 x 20 W |
| Dimmable conventional transformers | 1500 VA |
| Electronic transformers and dual-mode transformers | 1500 W |
| Minimum contact load | ≈ 15 W |
| Operating temperature | -5 ... +45 °C |
| Number of substations | unlimited |
| Cable length, extensions | max. 50 m |
| Load cable length | max. 100 m |
| Screw terminals | max. 2 x 1,5/1 x 2,5 mm² |
| Housing installation depth | 22 mm |
| Claw guidance installation depth | 32 mm |

- low intrinsic energy requirement
- also usable as push-button relay switch
- with extension unit input for push-button (NO contact), single-surface operation and motion detector extension unit
- no conductive connection between supporting ring and spreading claws
- with screw terminals

Neutral conductor necessary!

Comprehensive transmission and reception functions, in conjunction with a KNX wireless application module.



| Design | Order no. | PU |
|---|---|---|
| Relay insert | **8512 12 00** | 1 |




quicklink

## KNX wireless timer quicklink

- Display




| | |
|---|---|
| Wireless transmission/reception frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Number of wireless channels | 1 |
| Number of quicklink links | max. 20 transmitter/receiver |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Astronomic time shift | ± 2 h |
| Random number generator | ± 15 min |
| Running accuracy | ± 3 min/year |
| Power reserve | ≈ 24 h |
| Number of switching times for on/off | 20 |
| Operating temperature | -5 ... +45 °C |

Control using device buttons, wireless transmitters and programmed switching times.

- low intrinsic energy requirement
- 2 independent preset programme memories, individually adaptable
- with switchover manual/automatic mode
- astro programme for sunrise/sundown switching with city/country or co-ordinate input, individually adaptable
- holiday programme for random variation of the switching times in automatic operation
- standalone programme, wireless and extension unit commands are not executed
- configurable transmission and/or reception behaviour
- with keylock
- party function, no execution of automatic, wireless and extension unit commands (switch protection)
- reset function (to factory setting)
- quicklink functions: switching, 2 scenes, time switching, NO contact push-button, forced control
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: +6 scenes, operating mode on/off, scene loading, time dimming value, push-button, status display
- with automatic summer-/winter time switching (can be switched off)
- indication of the application module/insert compatibility in the display
- LC display illuminated during operation
- LC display contrast is adjustable
- menu guidance available in German, English or French
- with anti-dismantling protection

| Suitable for | Order no. | Page |
|---|---|---|
| Relay insert | 8512 12 00 | 160 |
| Mains insert for KNX wireless application module | 8502 01 00 | 190 |







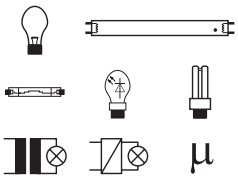


| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **8574 52 82** | 1 |
| polar white glossy | **8574 52 89** | 1 |
| polar white matt | **8574 52 88** | 1 |
| anthracite matt | **8574 52 85** | 1 |
| aluminium, matt, lacquered | **8574 52 83** | 1 |
| **Berker Q.1/Q.3** | | |
| white velvety | **8574 52 22** | 1 |
| polar white velvety | **8574 52 29** | 1 |
| anthracite velvety, lacquered | **8574 52 26** | 1 |
| aluminium velvety, lacquered | **8574 52 24** | 1 |
| **Berker K.1/K.5** | | |
| polar white glossy | **8574 52 79** | 1 |
| anthracite matt, lacquered | **8574 52 75** | 1 |
| aluminium, matt, lacquered | **8574 52 77** | 1 |
| stainless steel matt, lacquered | **8574 52 73** | 1 |
| **Berker R.1/R.3** | | |
| polar white glossy | **8574 52 39** | 1 |
| black glossy | **8574 52 31** | 1 |

## Wireless system platform motion detectors

### Inserts



**Relay insert**

| | |
|---|---|
| Operating voltage | 230 V~ |
| Frequency | 50/60 Hz |
| Power consumption (standby) | < 0.3 W |
| 230 V incandescent lamps and halogen lamps | 2300 W |
| 230 V retrofit LED lamps | 440 W |
| Dimmable energy-saving lamps | 440 W |
| Fluorescent lamps: | |
| - uncompensated | 1100 VA |
| - parallel compensated | 1000 W /130 µF |
| - in Duo circuit | 1000 W |
| - with electronical ballast (EB) | 1000 W |
| Compact fluorescent lamps with electronic ballast | 22 x 20 W |
| Dimmable conventional transformers | 1500 VA |
| Electronic transformers and dual-mode transformers | 1500 W |
| Minimum contact load | ≈ 15 W |
| Operating temperature | -5 ... +45 °C |
| Number of substations | unlimited |
| Cable length, extensions | max. 50 m |
| Load cable length | max. 100 m |
| Screw terminals | max. 2 x 1,5/1 x 2,5 mm² |
| Housing installation depth | 22 mm |
| Claw guidance installation depth | 32 mm |

– low intrinsic energy requirement
– also usable as push-button relay switch
– with extension unit input for push-button (NO contact), single-surface operation and motion detector extension unit
– no conductive connection between supporting ring and spreading claws
– with screw terminals

Neutral conductor necessary!

Comprehensive transmission and reception functions, in conjunction with a KNX wireless application module.



| Design | Order no. | PU |
|---|---|---|
| Relay insert | **8512 12 00** | 1 |




### Switch insert 1gang

| | |
|---|---|
| Operating voltage | 230 V~ |
| Frequency | 50/60 Hz |
| Power consumption (standby) | < 0.3 W |
| 230 V incandescent lamps and halogen lamps | 25 ... 400 W |
| Dimmable 230 V retrofit LED lamps | 5 ... 70 W |
| Dimmable energy-saving lamps | 13 ... 80 W |
| Dimmable conventional transformers | 25 ... 400 VA |
| Electronic transformers and dual-mode transformers | 25 ... 400 W |
| Operating temperature | -5 ... +45 °C |
| Number of substations | unlimited |
| Cable length, extensions | max. 50 m |
| Load cable length | max. 100 m |
| Screw terminals | max. 2 x 1,5/1 x 2,5 mm² |
| Insertion depth | 32 mm |

- low intrinsic energy requirement
- bulb-preserving soft startup
- automatic setting to dimmable loads (autoDetect process)
- short-circuit and overload proof (electronic fuse)
- optimisation of the dimming performance by fine adjustment of the load type and special adjustment mode
- with extension unit input for push-button (NO contact), single-surface operation and motion detector extension unit
- no conductive connection between supporting ring and spreading claws
- with screw terminals

**Caution!**
Only connect **dimmable** 230 V ESL or retrofit-LED lamps.

**Only suitable for operation with dimmable loads!**

Do not connect inductive and capacitive loads jointly.

Comprehensive transmission and reception functions, in conjunction with a KNX wireless application module.



| Design | Order no. | PU |
|---|---|---|
| Switch insert 1gang | **8512 11 00** | 1 |




### Touch dimmer (R, L)

| | |
|---|---|
| Operating voltage | 230 V~ |
| Frequency | 50/60 Hz |
| Power consumption (standby) | < 0.3 W |
| 230 V incandescent lamps and halogen lamps | 25 ... 400 W |
| Dimmable conventional transformers | 25 ... 400 VA |
| Number of universal capacity enhancers | max. 2 |
| Operating temperature | -5 ... +45 °C |
| Number of substations | unlimited |
| Cable length, extensions | max. 50 m |
| Load cable length | max. 100 m |
| Screw terminals | max. 2 x 1,5/1 x 2,5 mm² |
| Insertion depth | 32 mm |

- low intrinsic energy requirement
- switch-on brightness level can be stored safe after power failure
- bulb-preserving soft startup
- phase cut-on
- short-circuit and overload proof (electronic fuse)
- with extension unit input for push-button (NO contact) with single-surface operation and motion detector extension unit
- expandable with universal power boosters RMD Plus
- no conductive connection between supporting ring and spreading claws
- with screw terminals

Comprehensive transmission and reception functions, in conjunction with a KNX wireless application module.



| Design | Order no. | PU |
|---|---|---|
| Touch dimmer (R, L) | **8542 11 00** | 1 |




### Universal touch dimmer 1gang

| | |
|---|---|
| Operating voltage | 230 V~ |
| Frequency | 50/60 Hz |
| Power consumption (standby) | < 0.3 W |
| 230 V incandescent lamps and halogen lamps | 25 ... 400 W |
| Dimmable 230 V retrofit LED lamps | 5 ... 70 W |
| Dimmable energy-saving lamps | 13 ... 80 W |
| Dimmable conventional transformers | 25 ... 400 VA |
| Electronic transformers and dual-mode transformers | 25 ... 400 W |
| Operating temperature | -5 ... +45 °C |
| Number of substations | unlimited |
| Cable length, extensions | max. 50 m |
| Load cable length | max. 100 m |
| Screw terminals | max. 2 x 1,5/1 x 2,5 mm² |
| Insertion depth | 32 mm |

- low intrinsic energy requirement
- bulb-preserving soft startup
- automatic setting to dimmable loads (autoDetect process)
- phase cut-on or cut-off according to load type, self-learning
- short-circuit and overload proof (electronic fuse)
- optimisation of the dimming performance by fine adjustment of the load type and special adjustment mode
- with extension unit input for push-button (NO contact) with single-surface operation and motion detector extension unit
- no conductive connection between supporting ring and spreading claws
- with screw terminals

Do not connect inductive and capacitive loads jointly.

Comprehensive transmission and reception functions, in conjunction with a KNX wireless application module.

| Design | Order no. | PU |
|---|---|---|
| Universal touch dimmer 1gang | **8542 12 00** | 1 |

## KNX wireless motion detector application modules



### KNX wireless motion detector comfort 1.1 m quicklink

| | |
|---|---|
| Wireless transmission frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of wireless channels | 1 |
| Number of quicklink links | max. 20 transmitter/receiver |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Delay time, adjustable | ≈ 1 s ... 3 h |
| Nominal mounting height | 1.1 m |
| Detection angle, settable | each side ≈ 45 ... 90 ° |
| Response sensitivity, settable | ≈ 10 ... 100 % |
| Response brightness, adjustable | ≈ 5 ... 1000 lx, ∞ lx (day) |
| Range, frontal | ≈ 12 m |
| Range, side | each ≈ 8 m |
| Detection field, rectangular shaped | ≈ 12 x 16 m |
| Switch-off pre-warning to dimming value 50% for | 30 s |
| Operating temperature | -5 ... +45 °C |
| Assembling height | 34 mm |

- low intrinsic energy requirement
- with memory function for presence simulation
- teach function for response brightness via button
- with keylock
- party function for switching on for 2 hours
- reset function (to factory setting)
- switch-off pre-warning on dimmer inserts
- quicklink functions: switching, dimming, 2 scenes, time switching, NO contact push-button, Memory, forced control, Master-Slave
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: +6 scenes, operating mode on/off, push-button, status display, dimming value, brightness display, movement scene loading, no movement scene loading
- LED application module/insert compatibility display
- with operation and status LED, red/green/orange
- with configuration and function LEDs
- with configuration and function button
- with button for on/off/automatic/memory/party function
- remote control via quicklink transmitter
- scene opening via KNX wireless appliances
- scene saving lockable
- µ-processor controlled mode of operation
- with anti-dismantling protection
- optional operation of extension units using installation push-button

Continuous direct sunlight penetrating the upward-pointing detection plane can result in failure of the motion detector.
Only suitable for indoor areas!

| Suitable for | Order no. | Page |
|---|---|---|
| Inserts | | 168 to 170 |
| Mains insert for KNX wireless application module | 8502 01 00 | 190 |

| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **8534 51 82** | 1 |
| polar white glossy | **8534 51 89** | 1 |
| polar white matt | **8534 51 88** | 1 |
| anthracite matt | **8534 51 85** | 1 |
| aluminium, matt, lacquered | **8534 51 83** | 1 |







| Design | Order no. | PU |
|---|---|---|
| **Berker Q.1/Q.3** | | |
| white velvety | **8534 51 22** | 1 |
| polar white velvety | **8534 51 29** | 1 |
| anthracite velvety, lacquered | **8534 51 26** | 1 |
| aluminium velvety, lacquered | **8534 51 24** | 1 |
| **Berker K.1/K.5** | | |
| polar white glossy | **8534 51 79** | 1 |
| anthracite matt, lacquered | **8534 51 75** | 1 |
| aluminium, matt, lacquered | **8534 51 77** | 1 |
| stainless steel matt, lacquered | **8534 51 73** | 1 |
| **Berker R.1/R.3** | | |
| polar white glossy [1] | **8534 51 39** | 1 |
| black glossy [1] | **8534 51 31** | 1 |

[1] no dismantling protection possible











### KNX wireless motion detector comfort 2.2 m quicklink

| | |
|---|---|
| Wireless transmission frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of wireless channels | 1 |
| Number of quicklink links | max. 20 transmitter/receiver |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Delay time, adjustable | ≈ 1 s ... 3 h |
| Nominal mounting height | 2.2 m |
| Detection angle, settable | each side ≈ 45 ... 90 ° |
| Response sensitivity, settable | ≈ 10 ... 100 % |
| Response brightness, adjustable | ≈ 5 ... 1000 lx, ∞ lx (day) |
| Range, frontal | ≈ 8 m |
| Range, frontal (at 1.1 m installation height) | ≈ 4 m |
| Range, side | each ≈ 6 m |
| Range, side (at 1.1 m installation height) | each ≈ 3 m |
| Detection field, rectangular shaped | ≈ 8 x 12 m |
| Switch-off pre-warning to dimming value 50% for | 30 s |
| Operating temperature | -5 ... +45 °C |
| Assembling height | 34 mm |

- low intrinsic energy requirement
- with memory function for presence simulation
- teach function for response brightness via button
- with keylock
- party function for switching on for 2 hours
- reset function (to factory setting)
- switch-off pre-warning on dimmer inserts
- quicklink functions: switching, dimming, 2 scenes, time switching, NO contact push-button, Memory, forced control, Master-Slave
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: +6 scenes, operating mode on/off, push-button, status display, dimming value, brightness display, movement scene loading, no movement scene loading
- LED application module/insert compatibility display
- with operation and status LED, red/green/orange
- with configuration and function LEDs
- with configuration and function button
- with button for on/off/automatic/memory/party function
- remote control via quicklink transmitter
- scene opening via KNX wireless appliances
- scene saving lockable
- µ-processor controlled mode of operation
- with anti-dismantling protection
- optional operation of extension units using installation push-button

| Suitable for | Order no. | Page |
|---|---|---|
| Inserts | | 168 to 170 |
| Mains insert for KNX wireless application module | 8502 01 00 | 190 |





| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **8534 61 82** | 1 |
| polar white glossy | **8534 61 89** | 1 |
| polar white matt | **8534 61 88** | 1 |
| anthracite matt | **8534 61 85** | 1 |
| aluminium, matt, lacquered | **8534 61 83** | 1 |
| **Berker Q.1/Q.3** | | |
| white velvety | **8534 61 22** | 1 |
| polar white velvety | **8534 61 29** | 1 |
| anthracite velvety, lacquered | **8534 61 26** | 1 |
| aluminium velvety, lacquered | **8534 61 24** | 1 |





| Design | Order no. | PU |
|---|---|---|
| **Berker K.1/K.5** | | |
| polar white glossy | **8534 61 79** | 1 |
| anthracite matt, lacquered | **8534 61 75** | 1 |
| aluminium, matt, lacquered | **8534 61 77** | 1 |
| stainless steel matt, lacquered | **8534 61 73** | 1 |
| **Berker R.1/R.3** | | |
| polar white glossy [1] | **8534 61 39** | 1 |
| black glossy [1] | **8534 61 31** | 1 |

[1] no dismantling protection possible

## Surface-mounted motion detectors



quicklink 2,5 m IP55

### KNX wireless motion detector 220° surface-mounted

| | |
|---|---|
| Operating voltage | 4.5 V= |
| Battery service life | ≈ 4 years |
| Wireless transmission frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of wireless channels | 1 |
| Number of quicklink links | max. 20 transmitter/receiver |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Delay time, adjustable | ≈ 1 s ... 3 h |
| Lockout time | 10 s |
| Recommended installation height | ≈ 2.5 m |
| Detection angle | 220 ° |
| Response sensitivity, settable | ≈ 20 ... 100 % |
| Response brightness, adjustable | ≈ 5 ... 1000 lx, ∞ lx (day) |
| Range, frontal | ≈ 16 m |
| Range, side | each ≈ 8 m |
| Detection field, semi-oval shaped | ≈ 16 x 16 m |
| Operating temperature | -20 ... +55 °C |
| Dimensions (W x H x D) | 91 x 130 x 153 mm |

- low intrinsic energy requirement
- reset function (to factory setting)
- quicklink functions: time switching, NO contact push-button
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: operating mode on/off, push-button, dimming value, brightness display, movement scene loading, no movement scene loading
- with battery status indicator
- with configuration LED
- with LED detection indicator
- with configuration button
- µ-processor controlled mode of operation
- with crawl-under protection
- with 3 Micro, alkaline batteries AAA LR03
- toolless quicklink configuration using buttons and LED display
- for wall and ceiling installation, corner installation with adapter
- vertically slewing and horizontally rotating
- with cover elements to limit the detection field
- wall retaining plate and fastening material included in scope of delivery

| Suitable for optional | Order no. | Page |
|---|---|---|
| Surface-mounted corner mounting adapter for motion detector | EE855 | 173 |



| Design | Order no. | PU |
|---|---|---|
| polar white matt | **TRE520** | 1 |
| anthracite | **TRE521** | 1 |



2,5 m

IP55

### KNX wireless motion detector 220° solar

| | |
|---|---|
| Operating voltage | 4.5 V= |
| Wireless transmission frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of wireless channels | 1 |
| Number of quicklink links | max. 20 transmitter/receiver |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Delay time, adjustable | ≈ 1 s ... 3 h |
| Lockout time | 10 s |
| Recommended installation height | ≈ 2.5 m |
| Detection angle | 220 ° |
| Response sensitivity, settable | ≈ 20 ... 100 % |
| Response brightness, adjustable | ≈ 5 ... 1000 lx, ∞ lx (day) |
| Range, frontal | ≈ 16 m |
| Range, side | each ≈ 8 m |
| Detection field, semi-oval shaped | ≈ 16 x 16 m |
| Operating temperature | -20 ... +55 °C |
| Dimensions (W x H x D) | 91 x 130 x 153 mm |

- low intrinsic energy requirement
- reset function (to factory setting)
- quicklink functions: time switching, NO contact push-button
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: operating mode on/off, push-button, dimming value, brightness display, movement scene loading, no movement scene loading
- with configuration LED
- with LED detection indicator
- with configuration button
- µ-processor controlled mode of operation
- with crawl-under protection
- toolless quicklink configuration using buttons and LED display
- not dependent on mains power
- for wall and ceiling installation, corner installation with adapter
- vertically slewing and horizontally rotating
- with cover elements to limit the detection field
- wall retaining plate and fastening material included in scope of delivery

| Suitable for optional | Order no. | Page |
|---|---|---|
| Surface-mounted corner mounting adapter for motion detector | EE855 | 173 |

| Design | Order no. | PU |
|---|---|---|
| polar white matt | **TRE530** | 1 |
| anthracite | **TRE531** | 1 |



### KNX wireless motion detector 220° surface-mounted/ switch actuator 1gang surface-mounted set

- low intrinsic energy requirement
- the motion detector (transmitter) and switch actuator (receiver) are pre-configured for joint use
- set consists of KNX wireless controller 220°, surface-mounted (order no. 8536 51 00) and switch actuator, 1gang, surface-mounted (order no. 8516 51 00)

| Suitable for optional | Order no. | Page |
|---|---|---|
| Surface-mounted corner mounting adapter for motion detector | EE855 | 173 |

| Design | Order no. | PU |
|---|---|---|
| polar white matt/white | **TRE720** | 1 |



### Surface-mounted corner mounting adapter for motion detector

- for mounting, e.g. on building corners

| Suitable for | Order no. | Page |
|---|---|---|
| KNX wireless motion detector 220° surface-mounted | TRE520 | 172 |
| KNX wireless motion detector 220° solar | TRE530 | 173 |
| KNX wireless motion detector 220° surface-mounted/switch actuator 1gang surface-mounted set | TRE720 | 173 |

| Design | Order no. | PU |
|---|---|---|
| polar white matt | **EE855** | 1 |
| anthracite | **EE856** | 1 |

## Light sensitive switch



### KNX wireless brightness sensor

| | |
|---|---|
| Operating voltage | 3 V= |
| Battery service life | ≈ 4 years |
| Wireless transmission frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of wireless channels | 3 objects:<br>- input up / down<br>- slat angle / stop<br>- battery status |
| Number of quicklink links | max. 20 transmitter/receiver |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Sun setting range | ≈ 1 ... 10 klx |
| Twilight setting range | ≈ 10 ... 300 lx |
| Operating temperature | +0 ... +50 °C |
| Fibre optic cable, sensor cable length | ≈ 1.5 m |
| Dimensions (L x W x H) | 138 x 26 x 31 mm |
| Weight | ≈ 70 g |

- reset function (to factory setting)
- quicklink functions: up/down push-button
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: button function, battery condition
- with 2 potentiometers for sun/twilight and LED display for actual value
- with configuration LED
- with configuration button
- with 2 Micro, alkaline batteries AAA LR03
- toolless quicklink configuration using buttons and LED display
- confectioned, with fibre-optic cable and plug
- for suction cover to window pane
- with photodiode
- with adhesive pads and adhesive cable clips for fastening

| Suitable for | Order no. | Page |
|---|---|---|
| KNX wireless blind button quicklink | 8524 52 .. | 175 |
| KNX wireless blind time switch quicklink | 8574 51 .. | 176 |

| Design | Order no. | PU |
|---|---|---|
| polar white matt | **TRC321B** | 1 |

## Physical sensor

### Wireless magnetic contact



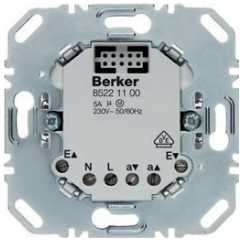
### KNX wireless magnetic contact

| | |
|---|---|
| Operating voltage | 3 V= |
| Battery service life | ≈ 4 years |
| Wireless transmission frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of wireless channels | 2 |
| Number of quicklink links | max. 20 transmitter/receiver |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Operating temperature | +0 ... +50 °C |
| Distance to magnet | max. 5 mm |
| Dimensions (L x W x H) | 138 x 26 x 31 mm |
| Weight | ≈ 70 g |

- reset function (to factory setting)
- quicklink functions: switching, blind, 2 scenes, time switching, NO contact push-button, forced control
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: value, delay time, button function, battery condition
- with configuration LED
- with transmission status, battery status and control LEDs
- with configuration button
- with 2 Micro, alkaline batteries AAA LR03
- toolless quicklink configuration using buttons and LED display
- with adapters for magnet height compensation
- with adhesive pads for fastening
- with additional screw terminals for wired reed contacts

| Design | Order no. | PU |
|---|---|---|
| polar white matt | **TRC301B** | 1 |

## Blind control



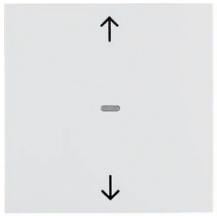

### Blind insert comfort

| | |
|---|---|
| Operating voltage | 230 V~ |
| Frequency | 50/60 Hz |
| Switching current (ohmic/ inductive) | max. 5 A |
| Switching current at cos φ = 0.6 | max. 3 A |
| Power consumption (standby) | < 0.1 W |
| Change-over time for change of direction | < 0.6 s |
| Operating temperature | -5 ... +45 °C |
| Number of substations | unlimited |
| Cable length, extensions | max. 50 m |
| Load cable length | max. 100 m |
| Screw terminals | max. 2 x 1,5/1 x 2,5 mm² |
| Housing installation depth | 22 mm |
| Claw guidance installation depth | 32 mm |

- low intrinsic energy requirement
- with 2 mechanically and electrically mutually-locked relay contacts
- with 230 V extension unit inputs for up and down
- for single, group and master controls
- no conductive connection between supporting ring and spreading claws
- circuiting of extension units push-buttons for blinds, blind inserts, key push-buttons for blinds
- with screw terminals

| Design | Order no. | PU |
|---|---|---|
| Blind insert comfort | **8522 11 00** | 1 |

### KNX wireless blind covers



### KNX wireless blind button quicklink

| | |
|---|---|
| Wireless transmission/ reception frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Number of wireless channels | 1 |
| Number of quicklink links | max. 20 transmitter/receiver |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | |
| Wireless transmission range (building) | max. 30 m |
| Venetian blind movement time | 2 min |
| Minimum slat adjustment time | ≈ 150 ms |
| Lamella adjustment on signal duration | < 1 s |
| Lamella adjustment on button-press | < 0.4 s |
| Change-over time for change of direction | < 0.6 s |
| Operating temperature | -5 ... +45 °C |

For manual actuation, automated memory execution or remote control via KNX wireless.

- low intrinsic energy requirement
- memory function for automatic execution of learned up and down times with position
- configurable transmission and/or reception behaviour
- party function, no execution of automatic, wireless and extension unit commands (lock-out protection)
- reset function (to factory setting)
- quicklink functions: blind, 2 scenes, memory, forced control, up/down push-button
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: +6 scenes, operating mode, status display, 2 x alarm
- LED application module/insert compatibility display
- with configuration and function LEDs
- with indicator LED for lock-out protection
- with status LED for memory and party function, red/ orange
- with configuration and function button
- scene opening via KNX wireless appliances
- slat position storable for scene
- with anti-dismantling protection
- toolless quicklink configuration using buttons and LED display
- sun protection and twilight-controlled lowering with wireless brightness sensor
- with imprinted symbol arrows

| Suitable for | Order no. | Page |
|---|---|---|
| Blind insert comfort | 8522 11 00 | 175 |
| Mains insert for KNX wireless application module | 8502 01 00 | 190 |
| **optional** | | |
| KNX wireless brightness sensor | TR321B | 174 |

| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **8524 52 82** | 1 |
| polar white glossy | **8524 52 89** | 1 |
| polar white matt | **8524 52 88** | 1 |
| anthracite matt | **8524 52 85** | 1 |
| aluminium, matt, lacquered | **8524 52 83** | 1 |







| Design | Order no. | PU |
|---|---|---|
| **Berker Q.1/Q.3** | | |
| polar white velvety | **8524 52 29** | 1 |
| anthracite velvety, lacquered | **8524 52 26** | 1 |
| aluminium velvety, lacquered | **8524 52 24** | 1 |
| **Berker K.1/K.5** | | |
| polar white glossy | **8524 52 79** | 1 |
| anthracite matt, lacquered | **8524 52 75** | 1 |
| aluminium, matt, lacquered | **8524 52 77** | 1 |
| stainless steel matt, lacquered | **8524 52 73** | 1 |
| **Berker R.1/R.3** | | |
| polar white glossy | **8524 52 39** | 1 |
| black glossy | **8524 52 31** | 1 |




quicklink

**KNX wireless blind time switch quicklink**

- Display




| | |
|---|---|
| Wireless transmission/ reception frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Number of wireless channels | 1 |
| Number of quicklink links | max. 20 transmitter/receiver |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Running time | 2 min |
| Astronomic time shift | ± 2 h |
| Random number generator for holiday program | ± 15 min |
| Running accuracy | ± 3 min/year |
| Power reserve | ≈ 24 h |
| Number of operation times for up/down | 20/day |
| Minimum slat adjustment time | ≈ 150 ms |
| Lamella adjustment on signal duration | < 1 s |
| Lamella adjustment on button-press | < 0.5 s |
| Change-over time for change of direction | < 0.6 s |
| Operating temperature | -5 ... +45 °C |

Control using device buttons, wireless transmitters and programmed switching times.

- low intrinsic energy requirement
- 2 independent preset programme memories, individually adaptable
- with switchover manual/automatic mode
- astro programme for sunrise/sundown switching with city/country or co-ordinate input, individually adaptable
- holiday programme for random variation of the operation times in automatic operation
- standalone programme, wireless and extension unit commands are not executed
- configurable transmission and/or reception behaviour
- with keylock
- party function, no execution of automatic, wireless and extension unit commands (lock-out protection)
- reset function (to factory setting)
- quicklink functions for integration into the individual, group and master control of blinds/shutters
- quicklink functions: blind, 2 scenes, forced control, up/down push-button
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- with automatic summer-/winter time switching (can be switched off)
- scene opening via KNX wireless appliances
- slat position storable for scene
- indication of the application module/insert compatibility in the display
- LC display illuminated during operation
- LC display contrast is adjustable
- menu guidance available in German, English or French
- with anti-dismantling protection
- sun protection and twilight-controlled lowering with wireless brightness sensor

| Suitable for | Order no. | Page |
|---|---|---|
| Blind insert comfort | 8522 11 00 | 175 |
| Mains insert for KNX wireless application module | 8502 01 00 | 190 |
| **optional** | | |
| KNX wireless brightness sensor | TR321B | 174 |

| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **8574 51 82** | 1 |
| polar white glossy | **8574 51 89** | 1 |
| polar white matt | **8574 51 88** | 1 |
| anthracite matt | **8574 51 85** | 1 |
| aluminium, matt, lacquered | **8574 51 83** | 1 |
| **Berker Q.1/Q.3** | | |
| white velvety | **8574 51 22** | 1 |
| polar white velvety | **8574 51 29** | 1 |
| anthracite velvety, lacquered | **8574 51 26** | 1 |
| aluminium velvety, lacquered | **8574 51 24** | 1 |







| Design | Order no. | PU |
|---|---|---|
| **Berker K.1/K.5** | | |
| polar white glossy | **8574 51 79** | 1 |
| anthracite matt, lacquered | **8574 51 75** | 1 |
| aluminium, matt, lacquered | **8574 51 77** | 1 |
| stainless steel matt, lacquered | **8574 51 73** | 1 |
| **Berker R.1/R.3** | | |
| polar white glossy | **8574 51 39** | 1 |
| black glossy | **8574 51 31** | 1 |

## Transmitters

### Hand-held transmitter



quicklink

#### KNX wireless hand-held 2-channel transmitter

- Labelling field



| | |
|---|---|
| Operating voltage | 6 V= |
| Battery service life [years] | ≈ 5 |
| Wireless transmission frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of wireless channels | 2 |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Operating temperature | -10 ... +45 °C |
| Dimensions (L x W x H) | 83 x 46.5 x 15.8 mm |

- reset function (to factory setting)
- quicklink functions: switching, dimming, blind, 2 scenes, time switching, NO contact push-button, memory
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: +6 scenes, operating mode on/off, push-button, status display, dimming value
- with configuration LED
- with transmission status and battery status LED, red/green/orange
- with configuration button
- with side locking buttons
- with 2 x lithium coin cell battery 3 V type: CR 2430
- with keyring




For wireless remote control of all assigned KNX wireless receivers.

| Design | Order no. | PU |
|---|---|---|
| polar white/grey, glossy/matt | **TU402** | 1 |



quicklink

#### KNX wireless hand-held 4-channel transmitter

- Labelling field



| | |
|---|---|
| Operating voltage | 6 V= |
| Battery service life [years] | ≈ 5 |
| Wireless transmission frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of wireless channels | 4 |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Operating temperature | -10 ... +45 °C |
| Dimensions (L x W x H) | 83 x 46.5 x 15.8 mm |

- reset function (to factory setting)
- quicklink functions: switching, dimming, blind, 2 scenes, time switching, NO contact push-button, memory
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: +6 scenes, operating mode on/off, push-button, status display, dimming value
- with configuration LED
- with transmission status and battery status LED, red/green/orange
- with configuration button
- with side locking buttons
- with 2 x lithium coin cell battery 3 V type: CR 2430
- with keyring




For wireless remote control of all assigned KNX wireless receivers.

| Design | Order no. | PU |
|---|---|---|
| polar white/grey, glossy/matt | **TU404** | 1 |



### KNX wireless hand-held 6-channel transmitter

- Labelling field



| | |
|---|---|
| Operating voltage | 6 V= |
| Battery service life | ≈ 5 years |
| Wireless transmission frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of wireless channels | 6 |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Operating temperature | +0 ... +45 °C |
| Dimensions (L x W x H) | 133.6 x 50.2 x 16 mm |

- reset function (to factory setting)
- quicklink functions: switching, dimming, blind, 2 scenes, time switching, NO contact push-button, memory
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: +6 scenes, operating mode on/off, push-button, status display, dimming value
- with configuration LED
- with transmission status and battery status LED, red/green/orange
- with 2 x lithium coin cell battery 3 V type: CR 2430




For wireless remote control of all assigned KNX wireless receivers.

| Design | Order no. | PU |
|---|---|---|
| polar white velvety | **TU406** | 1 |



### KNX wireless hand-held 18-channel transmitter

- Labelling field



| | |
|---|---|
| Operating voltage | 6 V= |
| Battery service life | ≈ 5 years |
| Wireless transmission frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of wireless channels | 18 |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Operating temperature | +0 ... +45 °C |
| Dimensions (L x W x H) | 133.6 x 50.2 x 16 mm |

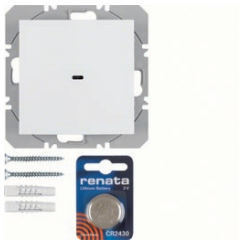
- reset function (to factory setting)
- quicklink functions: switching, dimming, blind, 2 scenes, time switching, NO contact push-button, memory
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: +6 scenes, operating mode on/off, push-button, status display, dimming value
- with configuration LED
- with transmission status and battery status LED, red/green/orange
- with 2 x lithium coin cell battery 3 V type: CR 2430
- with channel group slide switch
- with movement and actuation-dependent labelling field illumination




For wireless remote control of all assigned KNX wireless receivers.

| Design | Order no. | PU |
|---|---|---|
| white/dark blue | **TU418** | 1 |

## Wall-transmitters

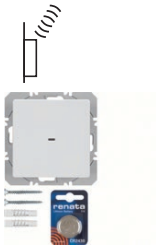


### KNX wireless wall-transmitter 1-gang flat quicklink

| | |
|---|---|
| Operating voltage | 3 V= |
| Battery service life | ≈ 5 years |
| Wireless transmission frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of wireless channels | 2 |
| Number of quicklink links | max. 20 transmitter/receiver |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Operating temperature | -5 ... +45 °C |
| Assembling height | 14 mm |

For wireless remote control of all assigned KNX wireless receivers.

- reset function (to factory setting)
- quicklink functions: switching, dimming, blind, 2 scenes, time switching, NO contact push-button, memory
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: +6 scenes, operating mode on/off, push-button, status display, dimming value
- with configuration LED
- with transmission status and battery status LED, red/green/orange
- with configuration button
- operating areas configurable as one or two-area operation
- with anti-dismantling protection
- with lithium coin cell battery 3 V type: CR 2430
- top and bottom operating area are freely configurable
- toolless quicklink configuration using buttons and LED display
- for flat surface mounting and extension of combinations









| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **8565 52 82** | 1 |
| polar white glossy | **8565 52 89** | 1 |
| polar white matt | **8565 52 88** | 1 |
| anthracite matt | **8565 52 85** | 1 |
| aluminium, matt, lacquered | **8565 52 83** | 1 |
| **Berker Q.1/Q.3** | | |
| white velvety | **8565 52 22** | 1 |
| polar white velvety | **8565 52 29** | 1 |
| anthracite velvety, lacquered | **8565 52 26** | 1 |
| aluminium velvety, lacquered | **8565 52 24** | 1 |
| **Berker K.1/K.5** | | |
| polar white glossy | **8565 52 79** | 1 |
| anthracite matt, lacquered | **8565 52 75** | 1 |
| aluminium, matt, lacquered | **8565 52 77** | 1 |
| stainless steel matt, lacquered | **8565 52 73** | 1 |
| **Berker R.1/R.3** | | |
| polar white glossy [1)] | **8565 52 39** | 1 |
| black glossy [1)] | **8565 52 31** | 1 |

[1)] no dismantling protection possible



quicklink

### KNX wireless wall-transmitter 2-gang flat quicklink

| | |
|---|---|
| Operating voltage | 3 V= |
| Battery service life | ≈ 5 years |
| Wireless transmission frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of wireless channels | 4 |
| Number of quicklink links | max. 20 transmitter/receiver |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Operating temperature | -5 ... +45 °C |
| Assembling height | 14 mm |

For wireless remote control of all assigned KNX wireless receivers.

- reset function (to factory setting)
- quicklink functions: switching, dimming, blind, 2 scenes, time switching, NO contact push-button, memory
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: +6 scenes, operating mode on/off, push-button, status display, dimming value
- with configuration LED
- with transmission status and battery status LED, red/green/orange
- with configuration button
- operating areas configurable as one or two-area operation
- with anti-dismantling protection
- with lithium coin cell battery 3 V type: CR 2430
- top and bottom operating areas are freely configurable
- toolless quicklink configuration using buttons and LED display
- for flat surface mounting and extension of combinations



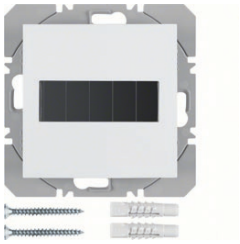






| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **8565 62 82** | 1 |
| polar white glossy | **8565 62 89** | 1 |
| polar white matt | **8565 62 88** | 1 |
| anthracite matt | **8565 62 85** | 1 |
| aluminium, matt, lacquered | **8565 62 83** | 1 |
| **Berker Q.1/Q.3** | | |
| white velvety | **8565 62 22** | 1 |
| polar white velvety | **8565 62 29** | 1 |
| anthracite velvety, lacquered | **8565 62 26** | 1 |
| aluminium velvety, lacquered | **8565 62 24** | 1 |
| **Berker K.1/K.5** | | |
| polar white glossy | **8565 62 79** | 1 |
| anthracite matt, lacquered | **8565 62 75** | 1 |
| aluminium, matt, lacquered | **8565 62 77** | 1 |
| stainless steel matt, lacquered | **8565 62 73** | 1 |
| **Berker R.1/R.3** | | |
| polar white glossy [1] | **8565 62 39** | 1 |
| black glossy [1] | **8565 62 31** | 1 |

[1] no dismantling protection possible



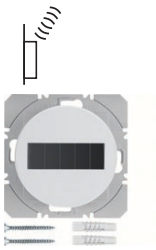
### KNX wireless wall-transmitter 1-gang flat solar quicklink

| | |
|---|---|
| Operating voltage | 3 V= |
| Wireless transmission frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of wireless channels | 2 |
| Number of quicklink links | max. 20 transmitter/receiver |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Required Ø brightness | at least 300 lx 6 h/day |
| Operating temperature | -5 ... +45 °C |
| Assembling height | 14 mm |

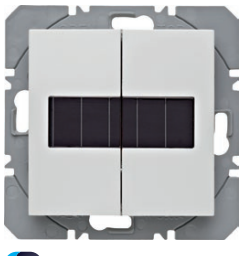
For wireless remote control of all assigned KNX wireless receivers.

- reset function (to factory setting)
- quicklink functions: switching, dimming, blind, 2 scenes, time switching, NO contact push-button, memory
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: +6 scenes, operating mode on/off, push-button, status display, dimming value
- with configuration LED
- with transmission status and battery status LED, red/green/orange
- with configuration button
- operating areas configurable as one or two-area operation
- power supply via solar cells
- with anti-dismantling protection
- top and bottom operating area are freely configurable
- toolless quicklink configuration using buttons and LED display
- for flat surface mounting and extension of combinations

| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **8565 51 82** | 1 |
| polar white glossy | **8565 51 89** | 1 |
| polar white matt | **8565 51 88** | 1 |
| anthracite matt | **8565 51 85** | 1 |
| aluminium, matt, lacquered | **8565 51 83** | 1 |
| **Berker R.1/R.3** | | |
| polar white glossy [1] | **8565 51 39** | 1 |
| black glossy [1] | **8565 51 31** | 1 |



[1] no dismantling protection possible



### KNX wireless wall-transmitter 2-gang flat solar quicklink

| | |
|---|---|
| Operating voltage | 3 V= |
| Wireless transmission frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of wireless channels | 4 |
| Number of quicklink links | max. 20 transmitter/receiver |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Required Ø brightness | at least 300 lx 6 h/day |
| Operating temperature | -5 ... +45 °C |
| Assembling height | 14 mm |

For wireless remote control of all assigned KNX wireless receivers.

- reset function (to factory setting)
- quicklink functions: switching, dimming, blind, 2 scenes, time switching, NO contact push-button, memory
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: +6 scenes, operating mode on/off, push-button, status display, dimming value
- with configuration LED
- with transmission status and battery status LED, red/green/orange
- with configuration button
- operating areas configurable as one or two-area operation
- power supply via solar cells
- with anti-dismantling protection
- top and bottom operating areas are freely configurable
- toolless quicklink configuration using buttons and LED display
- for flat surface mounting and extension of combinations

| Design | Order no. | PU |
|---|---|---|
| **Berker S.1/B.3/B.7** | | |
| white glossy | **8565 61 82** | 1 |
| polar white glossy | **8565 61 89** | 1 |
| polar white matt | **8565 61 88** | 1 |
| anthracite matt | **8565 61 85** | 1 |
| aluminium, matt, lacquered | **8565 61 83** | 1 |





**Berker R.1/R.3**

| | | |
|---|---|---|
| polar white glossy | **8565 61 39** | 1 |
| black glossy | **8565 61 31** | 1 |

## Binary inputs



**KNX wireless binary input 2-gang flush-mounted 230 V**

| | |
|---|---|
| Operating voltage | 230 V~ |
| Frequency | 50/60 Hz |
| Wireless transmission frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of wireless channels | 2 |
| Number of quicklink links | max. 20 transmitter/receiver |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Pulse time | min. 50 ms |
| Operating temperature | -5 ... +45 °C |
| Conductor cross-section | 0.75 mm² ... 2.5 mm² |
| Binary cable length, extendable to | max. 10 m |
| Dimensions (Ø x H) | 53 x 27 mm |

- low intrinsic energy requirement
- reset function (to factory setting)
- quicklink functions: switching, dimming, blind, 2 scenes, time switching, NO contact push-button, memory, forced control, up/down push-button
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: +6 scenes, operating mode on/off, 1 up/down button control, push-button, 2 x alarm, status display
- with configuration LED
- with configuration button
- toolless quicklink configuration using buttons and LED display
- with 2 independent, mains supplied, binary inputs for potential-free contacts
- activation, for example, through switch, push-button, wind sensor, precipitation sensor, time switch
- confectioned, with 4-core cable
- for installation behind flush-mounted inserts
- with screw-in lift terminals

| **Suitable for** | **Order no.** | **Page** |
|---|---|---|
| Berker TS Crystal | | 97 |
| Glass sensors | | 89 |
| **Optional** | | |
| Push-button, NO contact | 1811 1. | 96 |

| Design | Order no. | PU |
|---|---|---|
| light grey | **TRB302B** | 1 |

## Switch actuators



IP55

### KNX wireless switch actuator 1-gang surface-mounted

| | |
|---|---|
| Operating voltage | 230 V~ |
| Frequency | 50/60 Hz |
| 230 V incandescent lamps and halogen lamps | 1500 W |
| Fluorescent lamps: | |
| - uncompensated | 600 VA |
| - with electronical ballast (EB) | 6 x 58 W |
| Compact fluorescent lamps | 6 x 18 W |
| Conventional transformers | 600 VA |
| Electronic transformers | 600 W |
| Wireless reception frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of quicklink links | max. 20 transmitter/receiver |
| Operating temperature | -10 ... +55 °C |
| Dimensions (L x W x H) | 150 x 85 x 35 mm |

- low intrinsic energy requirement
- repeat function can be activated to increase the wireless range
- reset function (to factory setting)
- quicklink functions: switching, 2 scenes, time switching, NO contact push-button, forced control
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: +6 scenes, operating mode on/off, status display
- with control LED for On/Off
- with manual operation on/off
- scene opening via KNX wireless appliances
- scene saving lockable
- toolless quicklink configuration using buttons and LED display
- with screw-in lift terminals

| Design | Order no. | PU |
|---|---|---|
| white | **TRE201** | 1 |



IP55

### KNX wireless switch actuator 2-gang surface-mounted

| | |
|---|---|
| Operating voltage | 230 V~ |
| Frequency | 50/60 Hz |
| Switching current | 2x 10 A/230 V AC1 A |
| 230 V incandescent lamps and halogen lamps | per channel 1500 W |
| Fluorescent lamps: | |
| - uncompensated | per channel 600 VA |
| - with electronical ballast (EB) | per channel 6 x 58 W |
| Compact fluorescent lamps | 18 W |
| Conventional transformers | 600 VA |
| Electronic transformers | per channel 600 W |
| Wireless reception frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of quicklink links | max. 20 transmitter/receiver |
| Operating temperature | -10 ... +55 °C |
| Dimensions (L x W x H) | 150 x 85 x 35 mm |

- low intrinsic energy requirement
- repeat function can be activated to increase the wireless range
- reset function (to factory setting)
- quicklink functions: switching, 2 scenes, time switching, NO contact push-button, forced control
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: +6 scenes, operating mode on/off, status display
- with control LED for On/Off
- with manual operation on/off per channel
- scene opening via KNX wireless appliances
- scene saving lockable
- toolless quicklink configuration using buttons and LED display
- with screw-in lift terminals

| Design | Order no. | PU |
|---|---|---|
| white | **TRE202** | 1 |



### KNX wireless switch actuator for plugs

| | |
|---|---|
| Operating voltage | 230 V~ |
| Frequency | 50/60 Hz |
| Switching current | 16 A |
| 230 V incandescent lamps and halogen lamps | 2300 W |
| Conventional transformers | 1600 VA |
| Electronic transformers and dual-mode transformers | 1200 W |
| Wireless reception frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of quicklink links | max. 20 transmitter/receiver |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Operating temperature | +0 ... +45 °C |
| Dimensions (W x H x D) | 98 x 54 x 77 mm |
| Assembling height | 41 mm |

- low intrinsic energy requirement
- repeat function can be activated to increase the wireless range
- reset function (to factory setting)
- quicklink functions: switching, 2 scenes, time switching, NO contact push-button
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: +6 scenes, operating mode on/off, forced control, status display
- with configuration and function LEDs
- with control LED for On/Off
- with configuration and function button
- with manual operation on/off
- scene opening via KNX wireless appliances
- scene saving lockable
- toolless quicklink configuration using buttons and LED display

For remote-controlled switching of electrical loads.

| Design | Order no. | PU |
|---|---|---|
| polar white matt, German standard | **TRC270D** | 1 |
| polar white matt, French standard | **TRC270F** | 1 |



### KNX wireless switch actuator 1gang/binary input 1gang surface-mounted

IP55

| | |
|---|---|
| Operating voltage | 230 V~ |
| Frequency | 50/60 Hz |
| Switching current | 10 A / 230 V AC1 |
| 230 V incandescent lamps and halogen lamps | 1500 W |
| Fluorescent lamps: | |
| - uncompensated | 600 VA |
| - with electronical ballast (EB) | 6 x 58 W |
| Compact fluorescent lamps | 6 x 18 W |
| Conventional transformers | 600 VA |
| Electronic transformers | 600 W |
| Wireless transmission/ reception frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of wireless channels | 1 |
| Number of quicklink links | max. 20 transmitter/receiver |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Operating temperature | -10 ... +55 °C |
| Dimensions (L x W x H) | 150 x 85 x 35 mm |

- low intrinsic energy requirement
- repeat function can be activated to increase the wireless range
- reset function (to factory setting)
- quicklink functions: switching, 2 scenes, time switching, NO contact push-button, forced control
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: +6 scenes, operating mode on/off, 1 up/down button control, push-button, 2 x alarm, status display
- with configuration and function LEDs
- with transmission status and control LED for On/Off
- with configuration and function button
- with manual operation on/off
- scene opening via KNX wireless appliances
- scene saving lockable
- toolless quicklink configuration using buttons and LED display
- with independent, mains supplied, binary input for potential-free contact
- activation, for example through switch, push-buttons, timer
- with screw-in lift terminals



| Design | Order no. | PU |
|---|---|---|
| white | **TRE400** | 1 |



### KNX wireless switch actuator 1gang output flush-mounted

| | |
|---|---|
| Operating voltage | 230 V~ |
| Frequency | 50/60 Hz |
| Switching current | |
| 230 V incandescent lamps and halogen lamps | 2300 W |
| Fluorescent lamps: | |
| - parallel compensated | 250 W |
| Conventional transformers | 800 VA |
| Electronic transformers | 1500 W |
| Wireless transmission/reception frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of wireless channels | 1 |
| Number of quicklink links | max. 20 transmitter/receiver |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Operating temperature | +0 ... +45 °C |
| Binary cable length | ≈ 20 cm |
| Binary cable length, extendable to | max. 5 m |
| Dimensions, sensor (Ø x H) | 53 x 30 mm |
| IP | 20 |

- low intrinsic energy requirement
- reset function (to factory setting)
- quicklink functions: switching, 2 scenes, time switching, NO contact push-button, forced control
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: +6 scenes, operating mode on/off, 1 up/down button control, push-button, 2 x alarm, status display
- ETS additional function: repeater function
- with configuration and function LEDs
- with transmission status and control LED for On/Off
- with configuration and function button
- scene opening via KNX wireless appliances
- scene saving lockable
- toolless quicklink configuration using buttons and LED display
- with independent, mains supplied, binary input for potential-free contact
- activation, for example through switch, push-buttons, timer
- confectioned, with 2-core cable
- for installation behind flush-mounted inserts
- with screw-in lift terminals

| Design | Order no. | PU |
|---|---|---|
| white | **TRB201** | 1 |



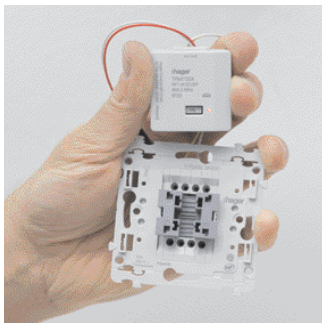
### KNX wireless switch actuator 1gang/binary input 1gang flush-mounted

| | |
|---|---|
| Operating voltage | 230 V~ |
| Frequency | 50/60 Hz |
| Switching current | |
| 230 V incandescent lamps and halogen lamps | 1500 W |
| Fluorescent lamps: | |
| - parallel compensated | 11x 36 W /47 µF |
| Conventional transformers | 800 VA |
| Electronic transformers | 600 W |
| Wireless transmission/ reception frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of wireless channels | 1 |
| Number of quicklink links | max. 20 transmitter/receiver |
| Wireless transmission power | < 10 mW |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Operating temperature | +0 ... +45 °C |
| Binary cable length | ≈ 20 cm |
| Binary cable length, extendable to | max. 5 m |
| Dimensions, sensor (Ø x H) | 53 x 30 mm |
| IP | 30 |

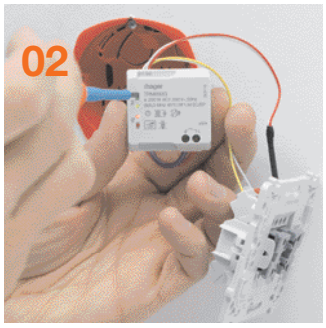
- low intrinsic energy requirement
- reset function (to factory setting)
- quicklink functions: switching, 2 scenes, time switching, NO contact push-button, forced control
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: +6 scenes, operating mode on/off, 1 up/down button control, push-button, 2 x alarm, status display
- ETS additional function: repeater function
- with configuration and function LEDs
- with transmission status and control LED for On/Off
- with configuration and function button
- scene opening via KNX wireless appliances
- scene saving lockable
- toolless quicklink configuration using buttons and LED display
- with independent, mains supplied, binary input for potential-free contact
- activation, for example through switch, push-buttons, timer
- confectioned, with 2-core cable
- for installation behind flush-mounted inserts
- with screw-in lift terminals

| Design | Order no. | PU |
|---|---|---|
| white | **TRB501** | 1 |



**01** Once the switch is connected to the emitter, start the configuration by pressing cfg button and then the button on the switch.







**02** Select the function on the output (1 function = 1 color pattern). Validate by a long press > 2s until the LED blinks.

**03** Exit configuration mode by a short press on cfg button on the emitter.

**1 color pattern = 1 function**

| LED colour | On/Off Receivers | | Dimmers | | Shutters/Blinds | |
|---|---|---|---|---|---|---|
| | Function | | Function | | Function | |
| | | On/Off (Toggle Switch) | | On/Off Dimming +/- | | Up/Stop (TRM692G only) |
| | on | ON | | ON (Dimming +) | | Up, Stop |
| | off | OFF | | OFF (Dimming -) | | Down, Stop |
| | 1 | Scenario 1 | 1 | Scenario 1 | 1 | Scenario 1 |
| | 2 | Scenario 2 | 2 | Scenario 2 | 2 | Scenario 2 |
| | | Timer | | Timer | | Down, Stop |
| | | On/Off (Switch) | | On/Off (Switch) | | Shutter Control (Switch) |
| | on | Priority ON * | | | | Priority UP |
| | off | Priority OFF * | | | | Priority DOWN |
| | | Clear | | Clear | | Clear |

*functions only available on TRMxxx

## Micromodules



**Wireless transmitter 2 inputs with battery**

| | |
|---|---|
| Supply voltage | 3 V CR 2430 |
| Transmission frequency | 868.3 MHz |
| Dimensions | 41 x 39.5 x 11 mm |
| Degree of protection | IP 30 |
| Max. connection distance per input | < 10 m |
| Minimum contacts closing time | 50 ms |
| Operating temperature | -10 °C to + 50 °C |
| Storage temperature | -20°C to +70°C |

- 2 independent input channels.
- supply by battery.

The specific functions of this product are defined in its configuration and set-up.

The flush-mounting input module TRM702A is a quicklink wireless transmitter. Powered by battery, it can be used to interface 2 floating contacts (switches, automatic-control contacts or intrusion alarm panel contacts) which can thus be rendered communicating. quicklink wireless products can be configured together and operated within the same wireless installation.

| Design | Order no. | PU |
|---|---|---|
| light grey | **TRM702A** | 1 |



**Wireless transmitter/receiver 2 inputs + 1 output 200W**

| | |
|---|---|
| Supply voltage | 230 V~ +10 %-15% 50/60 Hz<br>240 V~ +6%/-6% 50/60 Hz |
| Product consumption | 100mW |
| Transmission frequency | 868.3 MHz |
| Dimensions | 40 x 40 x 18 mm |
| Degree of protection | IP 20 |
| Max. connection distance per input | < 10 m |
| Minimum contacts closing time | 50 ms |
| Operating temperature | -15 °C to + 45 °C |
| Storage temperature | -25°C to +70°C |

- 2 inputs for connection of pushbuttons, switches or other automatic control contacts.
- one output to connect an electric load in ON/OFF mode.

TRM690G is a power supplied wireless transmitter/ receiver 2-wire, supplied in series with the 230 V load. It is used to control incandescent, LV and ULV halogen, and dimmable LED lights.

| Design | Order no. | PU |
|---|---|---|
| light grey | **TRM690G** | 1 |



**Wireless transmitter/receiver 2 inputs + 1 dimmer 200W**

| | |
|---|---|
| Supply voltage | 230 V~ +10 %-15% 50/60 Hz<br>240 V~ +6%/-6% 50/60 Hz |
| Product consumption | 100mW |
| Transmission frequency | 868.3 MHz |
| Dimensions | 40 x 40 x 18 mm |
| Degree of protection | IP 20 |
| Max. connection distance per input | < 10 m |
| Minimum contacts closing time | 50 ms |
| Operating temperature | -15 °C to + 45 °C |
| Storage temperature | -20°C to +70°C |

- 2 inputs for connection of pushbuttons, switches or other automatic control contacts.
- a dimming output (max. 200W).

The TRM691E is a wireless transmitter/receiver, powered in series with the load. It is used for dimming incandescent, LV and ULV halogen, and dimmable LED loads.

| Design | Order no. | PU |
|---|---|---|
| light grey | **TRM691E** | 1 |



**Wireless transmitter/receiver 2 inputs + 1 output 3A**

| | |
|---|---|
| Supply voltage | 230 V~ +10 %-15% 50/60 Hz<br>240 V~ +6%/-6% 50/60 Hz |
| Product consumption | 150mW |
| Typical dissipation under load | 450mW |
| Maximum switching rate at full load | 15 switching cycles/minute |
| Transmission frequency | 868.3 MHz |
| Dimensions | 40 x 40 x 20 mm |
| Electrical characteristics of the inputs | 12 V 1 mA |
| Surge voltage | 4KV |
| Degree of protection | IP 20 |
| Max. connection distance per input | < 10 m |
| Minimum contacts closing time | 50 ms |
| Operating temperature | -10 °C to + 50 °C |
| Storage temperature | -25°C to +70°C |

- 2 inputs for connection of pushbuttons, switches or other automatic control contacts.
- an output with relay, capable of ON-OFF switching of an electrical load

The TRM693G is a wireless transmitter/receiver, powered by the mains.
It is particularly suitable for ON/OFF control of lighting circuits at 230 V.

| Design | Order no. | PU |
|---|---|---|
| light grey | **TRM693G** | 1 |



**Wireless transmitter/receiver**
**2 inputs + 1 shutters/blinds output 3A**

| | |
|---|---|
| Supply voltage | 230 V~ +10 %-15% 50/60 Hz<br>240 V~ +6%/-6% 50/60 Hz |
| Product consumption | 150mW |
| Typical dissipation under load | 450mW |
| Time delay between 2 movements in opposite directions | 600ms |
| Maximum switching rate at full load | 15 switching cycles/minute |
| Transmission frequency | 868.3 MHz |
| Dimensions | 40 x 40 x 20 mm |
| Electrical characteristics of the inputs | 12 V 1 mA |
| Surge voltage | 4KV |
| Degree of protection | IP 20 |
| Max. connection distance per input | < 10 m |
| Minimum contacts closing time | 50 ms |
| Operating temperature | -10 °C to + 50 °C |
| Storage temperature | -25°C to +70°C |

- 2 inputs for connection of switches or pushbuttons.
- an output to control a motor for shutters, awnings or Venetian blinds.

The TRM692G is a wireless transmitter/receiver, powered by the mains.

| Design | Order no. | PU |
|---|---|---|
| light grey | **TRM692G** | 1 |



**Wireless transmitter/receiver**
**2 inputs + 1 output 4A**

| | |
|---|---|
| Supply voltage | 230 V~ +10 %-15% 50/60 Hz<br>240 V~ +6%/-6% 50/60 Hz |
| Product consumption | 150mW |
| Typical dissipation under load | 150mW |
| Maximum switching rate at full load | 20 switching cycles/minute |
| Transmission frequency | 868.3 MHz |
| Dimensions | 40 x 40 x 20 mm |
| Electrical characteristics of the inputs | 12 V 1 mA |
| Surge voltage | 4KV |
| Degree of protection | IP 20 |
| Max. connection distance per input | < 10 m |
| Operating temperature | -10 °C to + 50 °C |
| Storage temperature | -25°C to +70°C |

- 2 inputs for connection of pushbuttons, switches or other automatic control contacts, a fl oating contact output for ON-OFF control of electrical loads.

The TRM694G is a wireless transmitter/receiver, powered by the mains.

| Design | Order no. | PU |
|---|---|---|
| light grey | **TRM694G** | 1 |




**Control for latching relay and timer**

| | |
|---|---|
| Supply voltage | 230 V AC |
| Max. current consumption | 500mW |
| Total power loss under In | 150mW |
| Transmission frequency | 868.3 MHz |
| Dimensions | 40 x 40 x 18 mm |
| Rated current | 0.5A |
| Degree of protection | IP 20 |
| Operating temperature | -15 °C to + 45 °C |
| Storage temperature | -25°C to +70°C |

The function of RTM600 is to add a wireless control on an existing toggle or timer circuit. The product is located in the wall box behind a conventional push button which controls the existing 230V toggle or timer circuits. It acts as a wireless, receiver and delivers a 200ms pulse contact after receiving a wireless control.

| Design | Order no. | PU |
|---|---|---|
| light grey | **TRM600** | 1 |

## Wireless blind actuator



quicklink

### KNX wireless blind actuator 1gang surface-mounted

| | |
|---|---|
| Operating voltage | 230 V~ |
| Frequency | 50/60 Hz |
| Switching current | 10 A / 230 V AC1 |
| Wireless reception frequency | 868.3 MHz |
| Wireless protocol | KNX Wireless |
| Transmitter duty cycle | 1 % |
| Receiver category | 2 |
| Number of quicklink links | max. 20 transmitter/receiver |
| Wireless transmission range (free field) | max. 100 m |
| Wireless transmission range (building) | max. 30 m |
| Lamella adjustment on signal duration | < 1 s |
| Change-over time for change of direction | < 0.6 s |
| Operating temperature | -10 ... +55 °C |
| Dimensions (L x W x H) | 150 x 85 x 35 mm |
| IP | 55 |

- low intrinsic energy requirement
- repeat function can be activated to increase the wireless range
- reset function (to factory setting)
- quicklink functions: blind, 2 scenes, forced control, up/down push-button
- integration in the KNX wireless/TP gateway, surface-mounted, into the KNX TP system
- ETS additional functions: +6 scenes, operating mode, status display, 2 x alarm
- with configuration and function LEDs
- with control LED (relay closed)
- with configuration and function button
- with manual operation up/down
- scene opening via KNX wireless appliances
- scene saving lockable
- toolless quicklink configuration using buttons and LED display
- with 2 mechanically and electrically mutually-locked relay contacts
- with screw-in lift terminals

| Design | Order no. | PU |
|---|---|---|
| white | **TRE221** | 1 |

## Power supply for KNX wireless application modules




### Power supply for KNX wireless application module

| | |
|---|---|
| Operating voltage | 230 V~ |
| Frequency | 50/60 Hz |
| Power consumption (standby) | < 0.1 W |
| Operating temperature | -5 ... +45 °C |
| Screw terminals | max. 1 x 4/2 x 2,5 mm² |
| Insertion depth | 22 mm |
| Housing installation depth | 32 mm (claw guide) |

Comprehensive transmission and reception functions, in conjunction with a KNX wireless application module.

- low intrinsic energy requirement
- as supply for wireless application modules
- no conductive connection between supporting ring and spreading claws
- with screw terminals

| Suitable for | Order no. | Page |
|---|---|---|
| KNX wireless buttons for switches/dimmers | | 163 |
| KNX wireless motion detector application modules | | 170 |
| KNX wireless blind covers | | 175 |
| KNX wireless timer quicklink | 8574 52 .. | 167 |

| Design | Order no. | PU |
|---|---|---|
| Mains insert for KNX wireless application module | **8502 01 00** | 1 |

## Unidirectional wireless input concentrator



**Unidirectional wireless input concentrator**

| | |
|---|---|
| Supply voltage | 30V DC |
| Transmission frequency | 868.3 MHz |
| Dimensions | 203 x 77 x 26,5 mm |
| Degree of protection | IP 30 |
| Operating temperature | 0 °C to + 45 °C |
| Storage temperature | -20°C to +70°C |

- 24 channels available in the TX100 configuration.
- 32 channels available in the ETS configuration.
- maximum concentration of 24 wireless inputs per channel.
- view of status by 2x8 segment display.
- possibility to restore the factory settings for the product.
- possibility of deleting links created from the product.

The TR351 concentrators increase the number of unidirectional wireless products in a combined system (wireless/wire-based) by grouping together the inputs that perform the same function.

The precise functions of these products depend on the configuration and settings.

| Design | Order no. | PU |
|---|---|---|
| white | **TR351A** | 1 |



**Media coupler**

| | |
|---|---|
| Supply voltage | 30V DC (TBTS, SELV, ZLVS ) |
| Transmission frequency | 868.3 MHz |
| Dimensions | 203 x 77 x 26,5 mm |
| Degree of protection | IP 30 |
| Operating temperature | 0 °C to + 45 °C |
| Storage temperature | -20°C to +70°C |

- wire products and wireless products interface via bus KNX.
- Bus and wireless telegram visualization by LEDs and 2x8 segment display.

Couplers TR131 provide interface of tebis range wire products and wireless products. They are part of tebis installation system.

| Design | Order no. | PU |
|---|---|---|
| white | **TR131B** | 1 |

# sepio
# alarm system

The sepio wireless intrusion alarm is designed for retrofitting of residential buildings and small business premises.
More than just a basic alarm, sepio range offers you a user-friendly and interactive system, operating through smartphone interface, providing constant contact with the building and on-demand monitoring of what is happening at home.



# 09

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| Household protection | 200 |
| Fire protection | 201 |
| Receivers | 202 |
| Transmitters | 203 |
| Sirens | 204 |
| Accessories | 205 |
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## sepio wireless peripherals

### Commands

| 4-function remote control with information feedback | 4 inputs wireless remote control | Command keypad | Screen vocal keypad with tag | Tag for access management |
|---|---|---|---|---|
|  |  |  |  |  |
| RLF444X | TU444 | RLF620X | RLF660X | RLF101X<br>RLF110X (10 x) |

### Intrusion detection

| Motion detector | Outdoor motion detector 2x12m | Outdoor anti-masking detector | Dual technology motion detector | Pet tolerant IR detector camera with sending pictures |
|---|---|---|---|---|
|  |  |  |  |  |
| volumetric: S161-22F<br>corridor: S162-22X<br>curtain: S163-22X<br>expert pet tolerant: S165-22X | S145-22X | RLA144X | S121-22X | RLA176X<br>+ microSD card |

### Household protection

| Smoke detector | Heat detector | Loss of mains supply detector | Freezer breakdown detector | Flood detector |
|---|---|---|---|---|
|  |  |  |  |  |
| S155-22X | S157-22X | S233-22X | S232-22X | S235-22X |

### Sirens and transmitters

| Outdoor siren with orange flash | Indoor siren with vocal notification | ADSL master filter | PSTN + GSM/GPRS plug-in module | PSTN + GSM/ GPRS stand-alone transmitter |
|---|---|---|---|---|
|  |  |  |  |  |
| RLD405F<br>RLD415F (vocal) | RLD414X | 900-99X | RLD454F | RLD464F |

### Accessories

| GSM antenna | External receiver | Alarm interface | Wireless command receiver | Connecting socket with relay S155/157-22X |
|---|---|---|---|---|
|  |  |  |  |  |
| RXA03X | S791-22X - 12/24 V<br>S781-22X - 230 V | TRC120 | RLE700X | RXA05X |

External universal transmitter



S230-22X

Alarm pendant



RLF001X

Door and window detector



white: S261-22F
brown: S262-22F
multicontact:
white: S271-22F
brown: S272-22F

Detector for roller blind



white:
S231-22X
brown:
S236-22X

Glassbreak detector



S280-22X

Frost detector



S234-22X

## sepio control panel

Wireless alarm control panel LS, 4 groups: RLC304F



Memory card multilingual for RLC304F

RLH001X

1 wired input / 2 relay outputs module for RLC304F



RLH002X

## Control panel



**Wireless alarm control panel LS, 4 groups**

| | |
|---|---|
| Power supply | • RXU05X power pack (4.5V /14 Ah)<br>• RXU01X 200-240 V AC |
| Battery life | 5 years in normal conditions of use |
| Average current consumed | 235µA |
| Operating temperature | -10°C to 55°C |
| Degree of mechanical protection | IP30 / IK06 |
| Siren acoustic power | 100 (±2) dB(A) at 1m |
| Dimensions | 232 x 232 x 67.7mm |
| Weight | 1200g |

Central siren with integrated command keypad allowing to parameter and use sepio alarm system.

- control panels manage: intrusion protection, protection of individuals, fire alarm and household protection
- adapted for residential and small tertiary premises
- can control up to 4 separate protection groups
- speech synthesis (6 languages)
- 4 customizable command keys and 12 programming keys
- status change signal light
- vocal personalisation of the detectors (max. 40)
- log of the last 500 dates and time-stamped events
- 4-step progressive deterrence, with outdoor detector and outdoor siren emitting strobe flashes
- control can be operated from: remote, keypad with or without badge reader and with or without display, with or without voice synthesis, smartphone

| Design | Order no. | PU |
|---|---|---|
| white | **RLC304F** | 1 |



**Wireless alarm radio pack, 4 groups**

- 1 wireless alarm control panel 4 groups RLC304F
- 2 remote controls, 4 functions info feedback RLF444X
- 2 volumetric motion detectors S161-22F

| Design | Order no. | PU |
|---|---|---|
| pack | **RLP304F** | 1 |

## Commands



**4 inputs wireless remote control**

- 4 programmable keys wireless / hybrid alarm
- 4 programmable keys alarm / quicklink
- supply: 2 x batteries 3 V type CR2430 (included)

| Design | Order no. | PU |
|---|---|---|
| blue | **TU444** | 1 |



**Alarm pendant**

2 programmable commands
- slider (“alert” command)
- button (“alert” or “comfort” command, 10 years autonomy (1 call per day) and delivered with cord and clip)

| Design | Order no. | PU |
|---|---|---|
| white | **RLF001X** | 1 |



### Command keypad

| | |
|---|---|
| Power supply | 4.5V / 2.7Ah battery pack |
| Battery life | 3 years in normal conditions of use |
| Average current consumed | 90µA |
| Operating temperature | -10°C to 55°C |
| Degree of mechanical protection | IP30 |
| Dimensions | 194 x 95 x 19mm |
| Weight | 270g (with power pack) |

The command and information keypad can be used to operate an intrusion protection system from inside the home.

Each command is confirmed with an audible signal and a visual signal (LED) issued by the keypad. The keypad also indicates the system status and any faults or open doors or windows.

- 4 personnalisable keys
- code-based access to keypad commands
- alarm command functions
- 3-colour LED to support use and programming

| Design | Order no. | PU |
|---|---|---|
| white | **RLF620X** | 1 |



### Screen vocal keypad with tag

| | |
|---|---|
| Power supply | 4.5V / 2.7Ah battery pack |
| Battery life | 5 years in normal conditions of use |
| Average current consumed | 45µA |
| Operating temperature | -10°C to 55°C |
| Degree of mechanical protection | IP30 |
| Dimensions | 194 x 95 x 19mm |
| Weight | 220g (with power pack) |

The vocal keypad with tag reader and screen can be used to operate an intrusion protection system from inside the home.

- access codes
- tag reader (identification of up to 32 tags)
- 4 keys (2 pre-programmed, and 2 menu keys whose functions depend on what is displayed on the screen)
- touch screen zone for display navigation
- speech synthesis and OLED screen

| Design | Order no. | PU |
|---|---|---|
| white | **RLF660X** | 1 |




### 4-function remote control with information feedback

| | |
|---|---|
| Power supply | lithium battery 3V / 270mA/h CR2430 |
| Battery life | 5 years in normal conditions of use |
| Average current consumed | 45µA |
| Operating temperature | -10°C to 55°C |
| Degree of mechanical protection | IP30 |
| Dimensions | 194 x 95 x 19mm |
| Weight | 220g |

- access codes
- tag reader (identification of up to 32 tags)
- 4 keys (2 pre-programmed, and 2 menu keys whose functions depend on what is displayed on the screen)
- touch screen zone for display navigation
- speech synthesis and OLED screen

| Design | Order no. | PU |
|---|---|---|
| white | **RLF444X** | 1 |



### Tag for access management

- to be used with keypad RLF660X

| Design | Order no. | PU |
|---|---|---|
| orange | **RLF101X** | 1 |
| orange | **RLF110X** | 10 |

## Intrusion detection



**Volumetric motion detector**

| | | |
|---|---|---|
| Power supply | lithium battery pack 3V / 2.4Ah | - for indoor application |
| Detection angle | 90° | |
| Detection range | 12m | |
| Operating temperature | -10°C to +55°C | |
| Degree of mechanical protection | IP31 | |
| Dimensions | 58 x 102 x 57mm | |
| Weight | 115g | |

| Design | Order no. | PU |
|---|---|---|
| white | **S161-22F** | 1 |



**Corridor detector**

| | | |
|---|---|---|
| Power supply | lithium battery pack 3V / 2.4Ah | - for indoor application |
| Detection angle | 12° | |
| Detection range | 22m | |
| Operating temperature | -10°C to +55°C | |
| Degree of mechanical protection | IP31 | |
| Dimensions | 58 x 102 x 57mm | |
| Weight | 115g | |

| Design | Order no. | PU |
|---|---|---|
| white | **S162-22X** | 1 |



**Curtain detector**

| | | |
|---|---|---|
| Power supply | lithium battery pack 3V / 2.4Ah | - for indoor application |
| Detection angle | 8° | |
| Detection range | 12m | |
| Operating temperature | -10°C to +55°C | |
| Degree of mechanical protection | IP31 | |
| Dimensions | 58 x 102 x 57mm | |
| Weight | 115g | |

| Design | Order no. | PU |
|---|---|---|
| white | **S163-22X** | 1 |



**Expert pet tolerant motion detector**

| | | |
|---|---|---|
| Power supply | lithium battery pack 3V / 2.4Ah | - for indoor application |
| Detection angle | 85° | |
| Detection range | 12m | |
| Operating temperature | -10°C to +40°C | |
| Degree of mechanical protection | IP31 | |
| Dimensions | 58 x 102 x 57mm | |
| Weight | 115g | |

| Design | Order no. | PU |
|---|---|---|
| white | **S165-22X** | 1 |



**Pet-tolerant IR detector-camera with sending pictures**

| | |
|---|---|
| Power supply | lithium battery 4.5V / 3Ah |
| Detection angle | 90° |
| Detection range | 12m |
| Operating temperature | 0°C to +55°C |
| Degree of mechanical protection | IP31 |
| Dimensions | 125 x 85 x 67mm |
| Weight | 205g |

Fitted with a specific lens and able to record image sequences using its built-in camera, the PIR motion detector with image transmission detects intrusion in rooms at risk in the home and is able to distinguish between the presence of a human being and that of a pet (cat, dog).

Following infrared detection, the motion detector triggers the alerts and deterrents and records a sequence of images. These can then be:

- Stored on the microSD card (supplied)
- Remotely transmitted via a dialler/transmission module GSM/GPRS(MMS)

| Design | Order no. | PU |
|---|---|---|
| white | **RLA176X** | 1 |



**Outdoor anti-masking detector**

| | |
|---|---|
| Power supply | lithium battery 3.6V / 4Ah |
| Detection angle | 180° |
| Detection range | 5 setting levels from 2.5 to 12m |
| Operating temperature | -20°C to +60°C |
| Degree of mechanical protection | IP55 |
| Dimensions | 71 x 186 x 106mm |
| Weight | 540g |

- detects intrusion before break-in
- anti-masking protection: detects any fraudulent masking of the front face 24/24
- 6 ready-to-use area mask sets supplied to adapt detection area

| Design | Order no. | PU |
|---|---|---|
| white | **RLA144X** | 1 |



**Outdoor motion detector 2 x 12m**

| | |
|---|---|
| Power supply | lithium battery 3.6V / 4Ah |
| Detection range | 12m |
| Operating temperature | -20°C to +50°C |
| Degree of mechanical protection | IP55 |
| Dimensions | 56 x 128 x 235mm |
| Weight | 596g |

- for indoor / outdoor use

| Design | Order no. | PU |
|---|---|---|
| white | **S145-22X** | 1 |



**Wireless dual technology motion detector**

| | |
|---|---|
| Power supply | lithium battery 2 x (3.6V / 2Ah) |
| Detection angle | 90° |
| Detection range | 12m |
| Operating temperature | -10°C to +55°C |
| Degree of mechanical protection | IP31 |
| Dimensions | 125 x 75 x 65mm |
| Weight | 208g |

- dual technology: infrared and hyperfrequency

| Design | Order no. | PU |
|---|---|---|
| white | **S121-22X** | 1 |



**Wireless door and window detector**

| | | |
|---|---|---|
| Power supply | lithium battery 3V / 1Ah | - for indoor use |
| Operating temperature | -10°C to +55°C | |
| Degree of mechanical protection | IP31 | |
| Dimensions | 108 x 26 x 30mm | |
| Weight | 60g | |

The contact detector is used to protect openings such as doors & windows. It is fitted with a built-in magnetic contact (reed switch).

| Design | Order no. | PU |
|---|---|---|
| white | **S261-22F** | 1 |
| brown | **S262-22F** | 1 |



**Multicontact detector**

| | | |
|---|---|---|
| Power supply | lithium battery 3.6V / 1Ah | - for indoor use |
| Operating temperature | -10°C to +55°C | |
| Degree of mechanical protection | IP31 | |
| Dimensions | 138 x 26 x 30mm | |
| Weight | 70g | |

| Design | Order no. | PU |
|---|---|---|
| white | **S271-22F** | 1 |
| brown | **S272-22F** | 1 |



**External universal transmitter**

| | | |
|---|---|---|
| Power supply | lithium battery 2 x (3.6V / 2Ah) | - for outdoor use |
| Operating temperature | -25°C to +70°C | |
| Degree of mechanical protection | IP55 | |
| Dimensions | 130 x 80 x 35mm | |
| Weight | 200g | |

| Design | Order no. | PU |
|---|---|---|
| white | **S230-22X** | 1 |

## Household protection



**Detector for roller blinds**

| | | |
|---|---|---|
| Power supply | lithium battery 3.6V / 1Ah | - for indoor application |
| Operating temperature | -10°C to +55°C | |
| Degree of mechanical protection | IP31 | |
| Dimensions | 138 x 26 x 30mm | |
| Weight | 70g | |

| Design | Order no. | PU |
|---|---|---|
| white | **S231-22X** | 1 |
| brown | **S236-22X** | 1 |



**Glassbreak detector**

| | | |
|---|---|---|
| Power supply | lithium battery 2 x (3.6V / 2Ah) | - for indoor application |
| Operating temperature | -10°C to +55°C | |
| Degree of mechanical protection | IP31 | |
| Dimensions | 138 x 40 x 30mm | |
| Weight | 90g | |

| Design | Order no. | PU |
|---|---|---|
| white | **S280-22X** | 1 |



**Freezer breakdown detector**

Power supply lithium battery 2 x (3.6V / 2Ah)

| Design | Order no. | PU |
|---|---|---|
| white | **S232-22X** | 1 |



**Loss of mains supply detector**

Power supply lithium battery 2 x (3.6V / 2Ah)

| Design | Order no. | PU |
|---|---|---|
| white | **S233-22X** | 1 |



**Frost detector**

Power supply lithium battery 2 x (3.6V / 2Ah)

| Design | Order no. | PU |
|---|---|---|
| white | **S234-22X** | 1 |



**Flood detector**

Power supply lithium battery 2 x (3.6V / 2Ah)

| Design | Order no. | PU |
|---|---|---|
| white | **S235-22X** | 1 |

**Technical probes**

| Design | Order no. | PU |
|---|---|---|
| freezer breakdown | **SONPC** | 1 |
| mains power failure | **SONCS** | 1 |
| freezing | **SONHG** | 1 |
| flooding | **SONIN** | 1 |

## Fire protection



**Smoke detector**

| | | |
|---|---|---|
| Power supply | sealed lithium battery 2x3V | - for indoor application |
| Battery life | 10 years | |
| Detection signal | 85dB at 3m | |
| Operating temperature | -10°C to +65°C | |
| Degree of mechanical protection | IP22 | |
| Dimensions | Ø116 x 49mm | |
| Weight | 255g | |

| Design | Order no. | PU |
|---|---|---|
| white | **S155-22X** | 1 |



**Heat detector**

| | | |
|---|---|---|
| Power supply | sealed lithium battery 2x3V | - for indoor application |
| Battery life | 10 years | |
| Detection signal | 85dB at 3m | |
| Operating temperature | -10°C to +65°C | |
| Degree of mechanical protection | IP22 | |
| Dimensions | Ø116 x 49mm | |
| Weight | 255g | |

| Design | Order no. | PU |
|---|---|---|
| white | **S157-22X** | 1 |

## Receivers



**External receiver**

| | | |
|---|---|---|
| Operating temperature | -20°C to +70°C | - for indoor or outdoor application |
| Degree of mechanical protection | IP55 | |
| Dimensions | 150 x 85 x 35mm | |
| Weight | 224g | |

Possible applications: on/off, time lag, presence simulation (when associated to keypad), remote control, impulse mode, system status reporting, activation in case of intrusion.

| Design | Order no. | PU |
|---|---|---|
| 230V | **S781-22X** | 1 |
| 12 - 24V | **S791-22X** | 1 |



**Alarm interface**

| | | |
|---|---|---|
| Power supply | 30V DC via KNX bus | - for indoor application |
| Operating temperature | 0°C to +45°C | |
| Degree of mechanical protection | IP30 | |
| Dimensions | 203 x 77 x 26.5mm | |
| Weight | 140g | |

The TRC120 interface is used to enable Hager intrusion alarm system to communicate with the KNX world. On the alarm side, the interface communicates with the alarm central unit by wireless and by TP bus on the KNX side.

| Design | Order no. | PU |
|---|---|---|
| white | **TRC120** | 1 |



**Wireless command receiver**

| | | |
|---|---|---|
| Power supply | battery MPU01X | - for indoor or outdoor (in sheltered location) application |
| Operating temperature | -25°C to +70°C | |
| Degree of mechanical protection | IP54 | |
| Dimensions | 245 x 215 x 120mm | |
| Weight | 880g | |

The receiver makes it possible to:

- interface a hardwired alarm product or any other low voltage automatic pulsed control device with the alarm system,
- operate additional deterrence devices (smoke generator, lighting, etc.) and other electrical devices (low voltage or power)

| Design | Order no. | PU |
|---|---|---|
| white | **RLE700X** | 1 |

## Transmitters



### PSTN + GSM/GPRS stand-alone transmitter

| | |
|---|---|
| Power supply | battery |
| Battery life | 5 years in normal conditions of use |
| Average current consumed | 235µA |
| Operating temperature | -10°C to +55°C |
| Degree of mechanical protection | IP30 |
| Dimensions | 216 x 237 x 67mm |
| Weight | 1070g |

Power supply:
- (4.5 V, 14 Ah) RXU05X power pack - low voltage threshold standard Type C - low threshold 3.65 V
- or (4.5 V, 14 Ah) RXU05X power pack backed up by (3.7 V 1.3 Ah) RXU03X Li-Ion buffer battery
- or (200-240 VAC 50-60 Hz / 4.5 V DC 2.2 A) RXU01X internal mains power module backed up by (3.7 V/1.3 V) RXU03X Li-Ion buffer battery - Low voltage threshold Type A - 3.6V - recharge time 20 hours to 80% - Duration with back-up: 36 h.

The RLD464F dialler operates with the Hager Twinband® alarm system.
It is suitable for specific configurations when a plug-in module cannot be directly added to the control panel.
The RLD464F/T dialler is recommended for complete extended and redundant transmission in voice mode (analogical) via PSTN with GSM back-up.

| Design | Order no. | PU |
|---|---|---|
| white | **RLD464F** | 1 |



### PSTN + GSM / GPRS plug-in module

| | |
|---|---|
| Power supply | battery |
| Battery life | 5 years in normal conditions of use |
| Average current consumed | 235µA |
| Operating temperature | -10°C to +55°C |
| Degree of mechanical protection | IP30 |
| Dimensions | 165 x 63 x 35mm |
| Weight | 114g |

Power supply:
- (4.5 V, 14 Ah) RXU05X power pack - low voltage threshold standard Type C - low threshold 3.65 V
- or (4.5 V, 14 Ah) RXU05X power pack backed up by (3.7 V 1.3 Ah) RXU03X Li-Ion buffer battery
- or (200-240 VAC 50-60 Hz / 4.5 VDC 2.2 A) RXU01X internal mains power module backed up by (3.7 V / 1.3 V) RXU03X Li-Ion buffer battery - Low voltage threshold Type A - 3.6 V - recharge time 20 hours to 80% - Duration with back-up: 36 h.

The RLD454F plug-in module operates with the Hager Twinband® alarm system.
It can be fitted to the control panel as an optional device.
The RLD454F module is recommended for complete extended and redundant transmission in voice mode (analogical) via PSTN with GSM back-up.

| Design | Order no. | PU |
|---|---|---|
| white | **RLD454F** | 1 |

## Sirens



**Indoor siren with vocal notification**

| | |
|---|---|
| Power supply | lithium battery 2 x (3.6V / 13Ah) |
| Battery life | 5 years in normal conditions of use |
| Acoustic level | 93 (± 2) dB |
| Operating temperature | -10°C to +55°C |
| Degree of mechanical protection | IP31 |
| Dimensions | 178 x 191 x 61mm |
| Weight | 900g |

The indoor siren provides audible information and ensures intruder deterrence when an alarm is triggered.

It sounds loudly in the event of intrusion, fire, audible warnings or household faults and issues vocal notifications about the system status.

It can be used as a door chime.

| Design | Order no. | PU |
|---|---|---|
| white | **RLD414X** | 1 |



**Outdoor siren with orange flash**

| | |
|---|---|
| Power supply | battery 6V / 14 Ah RXU06X |
| Battery life | 5 years in normal conditions of use |
| Acoustic level | 103 (± 2) dB |
| Operating temperature | -25°C to +70°C |
| Degree of mechanical protection | IP54 |
| Dimensions | 235 x 256 x 90mm |
| Weight | 2500g |

- for outdoor application

In addition to the protection provided by the control panel with built-in siren and keypad, the outdoor siren deters intruders.

In the event of intrusion, the siren is immediately triggered and sounds loudly for 90 seconds.

If a fire is detected, the siren is triggered in fire sounding mode for 5 min.

If somebody attempts to pull the siren off the wall, it sounds and then triggers all the alerts and deterrents via the control panel.

Thanks to its built-in transmitter, the siren notifies the control panel of battery faults, the radio link status and the tamper pin status.

| Design | Order no. | PU |
|---|---|---|
| white | **RLD405F** | 1 |



**Outdoor vocal siren with orange flash**

| | |
|---|---|
| Power supply | battery 6V / 14 Ah RXU06X |
| Battery life | 5 years in normal conditions of use |
| Acoustic level | 103 (± 2) dB |
| Operating temperature | -25°C to +70°C |
| Degree of mechanical protection | IP54 |
| Dimensions | 235 x 256 x 90mm |
| Weight | 2500g |

- for outdoor application
- speech synthesis in 6 languages

In addition to the protection provided by the control panel with built-in siren and keypad, the outdoor siren deters intruders.

In the event of intrusion, the siren is immediately triggered and sounds loudly for 90 seconds.

If a fire is detected, the siren is triggered in loud sounding mode for 15 s alternated with “fire alarm” message.

If somebody attempts to pull the siren off the wall, it sounds and then triggers all the alerts and deterrents via the control panel.

Thanks to its built-in transmitter, the siren notifies the control panel of battery faults, the radio link status and the tamper pin status.

The speech synthesis system helps with alarm system use.

| Design | Order no. | PU |
|---|---|---|
| white | **RLD415F** | 1 |

## Accessories



**Replacement belt clip**

| Design | Order no. | PU |
|---|---|---|
| transparent | **RXA02X** | 1 |

**Memory card multilingual**

- for RLC304F
- 6 languages
- configuration, parameters and voice messages backup
- allows control panel change without reprogramming
- transfer of voice messages to a separated transmitter
- groups and transmission module backup

| Design | Order no. | PU |
|---|---|---|
| memory card | **RLH001X** | 1 |



**Multi socket RJ11 / RJ45-RJ45**

| Design | Order no. | PU |
|---|---|---|
| white | **856-99X** | 1 |



### ADSL master filter

| Design | Order no. | PU |
|---|---|---|
| ADSL master filter | **900-99X** | 1 |



### GSM antenna

- adhesive
- external antenna for RLD464F or RLD454F

| Design | Order no. | PU |
|---|---|---|
| black | **RXA03X** | 1 |




### MicroSD memory card

- for RLA176X

| Design | Order no. | PU |
|---|---|---|
| microSD | **RXE00X** | 1 |



### Smoke detector tester

| Design | Order no. | PU |
|---|---|---|
| spray can | **TESTFUM** | 1 |



### Glass break detector test unit

- supply unit included

| Design | Order no. | PU |
|---|---|---|
| white | **TV260** | 1 |



### Mains power supply module

- mains power supply: 200-240V AC - 50/60Hz / 4.5V DC 2.2A
- for RLC304F and RLD464F
- compatible with RXU03X

| Design | Order no. | PU |
|---|---|---|
| power supply module | **RXU01X** | 1 |



### 1 wired input / 2 relay outputs module

- for control panel RLC304F

Allows to connect the following components to the control panel:

- auto-powered wired siren
- alarm system (flash, voice module,...)
- recording system (recording controller, video recorder)

| Design | Order no. | PU |
|---|---|---|
| white | **RLH002X** | 1 |



### Connecting socket with relay (230V)

- for smoke detector S155-22X
- for heat detector S157-22X
- 1NO/1NC contact 230V (AC or DC)

| Design | Order no. | PU |
|---|---|---|
| white | **RXA05X** | 1 |

## Batteries

### Battery packs

| Design | Order no. | PU |
|---|---|---|
| battery pack, 4.5V / 2.7Ah for RLF620X and RLF660X | **RXU04X** | 1 |
| secondary battery Li-Ion, 3.7V / Ah | **RXU03X** | 1 |
| battery pack, 4.5V / 15Ah for RLC304F and RLD464F | **RXU05X** | 1 |
| battery pack, 6V / 15Ah for RLD450F and RLD415F | **RXU06X** | 1 |

### Lithium batteries

| Design | Order no. | PU |
|---|---|---|
| lithium battery, 3.6V / 4Ah for RLA144X and S145-22X | **BATLi05** | 1 |
| lithium battery, 3V type 2430 for RLF444X | **BATLi08** | 1 |
| lithium battery, 7.2V / 13Ah for RLD414X and RLE700X | **BATLi22** | 1 |
| lithium battery, 3.6V / 3Ah for RLA176X | **BATLi30** | 1 |

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| 161 | 39 | 1011 30 12 | 46 | 1012 21 14 | 64 | 1012 60 19 | 54 |
| 1311 | 96 | 1011 30 16 | 46 | 1012 21 16 | 64 | 1012 60 20 | 59 |
| 1321 | 96 | 1011 30 21 | 45 | 1012 21 25 | 65 | 1012 60 30 | 59 |
| 1341 | 96 | 1011 30 22 | 46 | 1012 21 35 | 65 | 1012 60 62 | 54 |
| 1366 | 96 | 1011 30 25 | 45 | 1012 21 45 | 63 | 1012 60 74 | 59 |
| 1388 | 96 | 1011 30 46 | 46 | 1012 21 69 | 64 | 1012 60 76 | 59 |
| 1391 | 96 | 1011 36 06 | 50 | 1012 21 74 | 63 | 1012 60 79 | 59 |
| 1392 | 96 | 1011 36 09 | 50 | 1012 21 79 | 64 | 1012 60 82 | 53 |
| 1394 | 96 | 1011 39 04 | 45 | 1012 21 84 | 63 | 1012 60 83 | 59 |
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| 1824 | 98 | 1011 60 14 | 54 | 1012 22 04 | 69 | 1012 60 86 | 53 |
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| 1870 | 98 | 1011 60 19 | 54 | 1012 22 14 | 69 | 1012 60 92 | 56 |
| 1871 | 92 | 1011 60 20 | 59 | 1012 22 16 | 69 | 1012 60 94 | 56 |
| 1011 21 04 | 64 | 1011 60 30 | 59 | 1012 22 25 | 70 | 1012 60 96 | 56 |
| 1011 21 09 | 64 | 1011 60 62 | 54 | 1012 22 35 | 70 | 1012 60 99 | 56 |
| 1011 21 14 | 64 | 1011 60 74 | 59 | 1012 22 45 | 68 | 1012 64 14 | 50 |
| 1011 21 16 | 64 | 1011 60 76 | 59 | 1012 22 69 | 70 | 1012 64 24 | 49 |
| 1011 21 35 | 65 | 1011 60 79 | 59 | 1012 22 74 | 68 | 1012 66 16 | 50 |
| 1011 21 45 | 63 | 1011 60 82 | 53 | 1012 22 79 | 70 | 1012 66 26 | 49 |
| 1011 21 74 | 63 | 1011 60 83 | 59 | 1012 22 84 | 69 | 1012 69 04 | 49 |
| 1011 21 79 | 64 | 1011 60 84 | 53 | 1012 22 89 | 68 | 1012 69 09 | 50 |
| 1011 21 84 | 63 | 1011 60 86 | 53 | 1012 23 34 | 68 | 1012 69 14 | 49 |
| 1011 21 89 | 63 | 1011 60 89 | 53 | 1012 23 39 | 67 | 1012 69 19 | 49 |
| 1011 22 04 | 69 | 1011 60 92 | 56 | 1012 23 44 | 67 | 1012 89 12 | 43 |
| 1011 22 09 | 69 | 1011 60 94 | 56 | 1012 23 49 | 67 | 1012 89 19 | 43 |
| 1011 22 14 | 69 | 1011 60 96 | 56 | 1012 23 54 | 67 | 1012 89 62 | 43 |
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| 1013 23 84 | 65 | 1013 99 49 | 42 | 1014 60 84 | 53 | 1015 30 16 | 46 |
| 1013 23 89 | 65 | 1013 99 59 | 44 | 1014 60 86 | 53 | 1015 30 21 | 45 |
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| 1024 60 12 | 54 | 1309 30 05 | 47 | 1319 21 45 | 35 | 1393 70 06 | 61 |
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| 1024 60 16 | 55 | 1309 30 16 | 48 | 1319 21 89 | 35 | 1458 01 | 143 |
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| 2411 11 06 | 36 | 7514 21 34 | 90 | 7516 15 94 | 78 | 7544 11 89 | 38 |
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| 7564 31 60 | 106 | 7566 57 29 | 27 | 8016 37 70 | 22 | 8096 03 75 | 29 |
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| 7566 27 26 | 26 | 7566 57 73 | 25 | 8016 37 74 | 22 | 8096 03 82 | 29 |
| 7566 27 29 | 26 | 7566 57 75 | 25 | 8016 37 76 | 22 | 8096 03 83 | 29 |
| 7566 27 70 | 24 | 7566 57 75 | 25 | 8016 37 80 | 22 | 8096 03 85 | 29 |
| 7566 27 73 | 24 | 7566 57 80 | 25 | 8016 37 85 | 22 | 8096 03 89 | 29 |
| 7566 27 74 | 24 | 7566 57 85 | 25 | 8016 47 70 | 23 | 8096 03 99 | 29 |
| 7566 27 75 | 24 | 7571 00 04 | 155 | 8016 47 73 | 23 | 8096 04 09 | 31 |
| 7566 27 80 | 24 | 7571 00 36 | 155 | 8016 47 74 | 23 | 8096 04 21 | 31 |
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