

NEW

# Products spring 2020

Versatile.  
Invisible.  
Clever.



Push-button  
sensors iON



Flush-mounted  
actuators



LAN Time switch

# The finest. Our highlights.



Push-button sensors iON

**Page 4/8**

The new iON push-button sensors for KNX and LUXORliving are a brilliant alternative to the binary inputs that have been available to date. iON push-button sensors are flexible and cut a stylish figure in every room thanks to their frameless design.



Flush-mounted actuators

**Page 5/10**

With its new wireless actuators, Theben is offering a practical option to expand or retrofit an existing KNX or LUXORliving smart home system. Thanks to encryption with KNX Data Secure, communication is optimally protected against interception and tampering.



LAN Time switch TC 649 E

**Page 7**

The Theben TC 649 E control box enables simple, convenient and fast data transmission of time and astro programs to individual devices using remote access via LAN.

## Dear customers and partners,

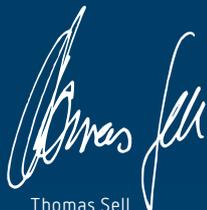
From light and heating control to smart homes and smart metering – the technologies, products and solutions in building technology are increasingly merging, becoming more automated and more closely networked. Even so, it is not just the big-time innovations that are making real progress. Targeted improvements to little details and product innovations that might at first seem unremarkable also provide significant benefits in the areas of efficiency, ease of use and security. And that's precisely in line with what our slogan communicates: „energy saving comfort“.

The new KNX flush-mounted wireless actuators, for instance, are the perfect solution for retrofitting a KNX-based smart home system. Thanks to KNX Data Secure, the actuators also provide encrypted, tamper-proof communication pathways. KNX Data Secure ensures secure communication in this case, too. Both products are also available in versions for the LUXORliving smart home system, adding to its fantastic ease of use by making it even simpler, more convenient and more secure.

Yours



Paul Sebastian Schwenk



Thomas Sell



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# Simple operation Superb functionality LUXORliving push-button sensors

The new LUXORliving iON push-button sensors are a brilliant alternative to the binary inputs that have been available to date. iON push-button sensors are flexible and cut a stylish figure in every room thanks to their frameless design. They can be configured using the free LUXORplug application and operated via the LUXORplay app.



## LUXORliving iON2

Working together with heating actuator technology, the LUXORliving push-button sensor with temperature sensor helps to regulate the room temperature.



## LUXORliving iON4

Colour status LEDs signal the current status of the push-button sensor, allowing you to see the status of the outdoor light, for instance, without having to go outside. The brightness of the status LEDs adjusts itself as required based on the surrounding brightness. If the room gets darker, the status LEDs are dimmed automatically, preventing disruptive light interference at night. During the day, the LEDs shine more brightly.



## LUXORliving iON8

You can select a suitable icon for each of the 10 functions on the iON room controller from a library. The icon is supplemented with individual function names and the current status (on/off/dimming value/location). This makes the room controller easier to use and navigate. The brightness of the LCD display adjusts itself based on the surrounding brightness. If the room is dark, the backlight on the display is dimmed, preventing disruptive lighting effects. During the day, the display shines more brightly, so it is easy to read when there is lots of ambient light.

[Product information on page 18](#)

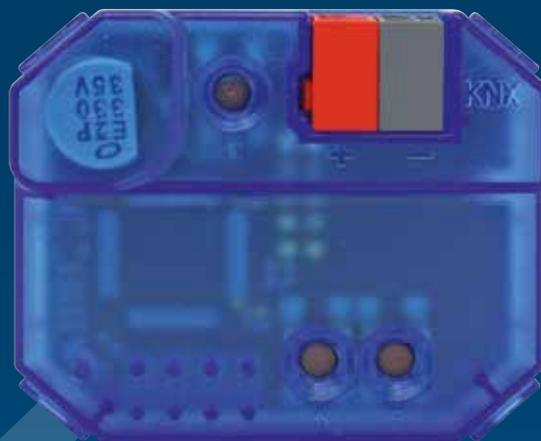
# Want to expand your smart home? No problem!

## LUXORliving wire- less flush-mounted actuators

With its new wireless actuators, Theben is offering a practical option to expand or retrofit an existing LUXORliving smart home system. This means, for example, that extensions or retrofitted awnings can be easily integrated into the existing wired system by wireless transmission.

Thanks to the media coupler, you can easily link wired and wireless components.

Buttons, window contacts and temperature sensors can be directly integrated via the inputs of the flush-mounted actuators. And if you prefer a wired KNX installation in the future, you simply continue to use all LUXORliving products. Sure and safe!



### Speaking of safety:

Communication between wireless actuators and lighting, blinds and heating is, of course, encrypted. That leaves no opportunities open for data theft or tampering.



LUXORliving D1 RF  
dimming actuator



LUXORliving S1 RF  
switch actuator



LUXORliving J1 RF  
blind actuator



LUXORliving H1 RF  
heating actuator



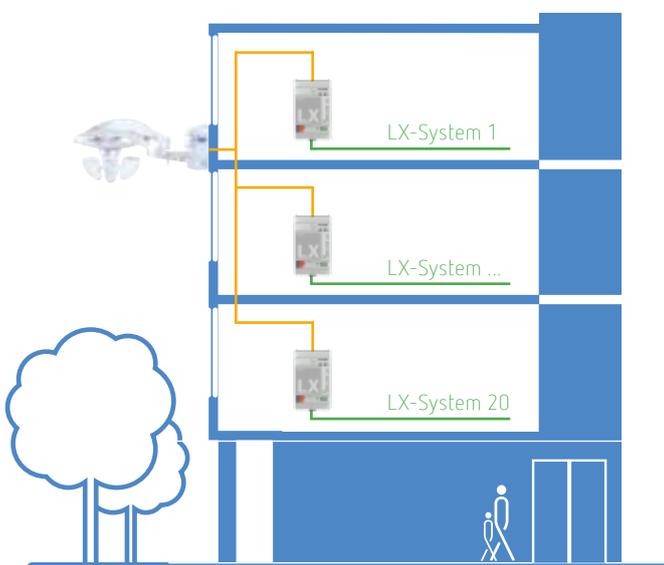
LUXORliving T4 RF  
button interface

Product information on page 14



# Let the weather work for you! With the LUXORliving weather station

Product information on page 20



It's true that you can't change the weather. But you can use sunlight, wind, temperature and rain to control your blinds and sun protection via your LUXORliving smart home system.

How does it work? Easily – with the LUXORliving M140 weather station from Theben.

The weather station brings down the blinds and lowers the room heating; for example, when there is direct sun radiation. Or it brings the blinds into a secure position during strong winds. And if it starts to rain, delicate textile hangings are automatically retracted. The weather station can also automatically open the hangings at dawn and close them when it gets dark in the evening as required.

With the new weather sensor LUXORliving M100 and the weather station M130 you can cover multiple LUXORliving installations at the same time. The weather sensor delivers the information to the weather station. This means that up to 20 LUXORliving installations - for example in an apartment building - will get valuable weather information.

This reduces the device costs and saves installation time.

# Total control. Maximum efficiency

## TC 649 E control box



### Control of individual devices using remote access via LAN

The Theben TC 649 E control box enables simple, convenient and fast data transmission of time and astro programs.

In industry and branch businesses, the control of consumers has so far mainly been carried out with individual devices, which have to be programmed directly on site. In this case, alterations always require a walk to the device.

With the new TC 649 E control box, individual applications can be programmed directly via the LAN network.

The connection is established via the company's internal LAN network. This ensures compliance with all security requirements applicable within the LAN network. Each device is provided with the application software via an integrated web server.

Time, astro and annual programs can be transmitted. Direct switching is also possible.



#### Secure operation in the company network (LAN)

The control box is integrated into the company's own network, remotely controllable via networks like a VPN. This enables you to operate your control boxes in the secure environment that you are already using successfully.



#### Maximum investment protection

Access your time and astro programs whenever you need them via the central storage, and continue to use previously created programs.



#### Always up to date

Thanks to the update option, you can always keep your software up to date.



#### Greater flexibility

Control your switched applications in different places at the click of a mouse from your control centre.



#### Increased exposure

Participate in high-publicity events such as the WWF Earth Hour to promote your company's sustainability measures.



#### Reduced costs

Make changes to switching times, for instance, in just a few minutes – without expensive staff resources. This also does away with the need for extensive travel.



#### Quick installation

The control box is installed easily via plug connections.



#### Less energy consumption

Only switch on your consumers when they are actually in use and thus reduce your electricity costs.

# iON KNX push-button sensor and room controller

## Looks great, works great

The new iON KNX push-button sensors and room controller with integrated temperature sensor enable you to trigger various functions in KNX installations at the touch of a button.

For example:

- Switching lights on and off and dimming lights
- Adjusting lighting colours and calling up lighting scenarios
- Raising and lowering blinds
- Initiating and saving user-specific scenes
- Operating central or group functions

The push-button sensors are available in various designs: as a single sensor (two buttons), a double sensor (four buttons) and a room controller with LCD display and Bluetooth interface.

Depending on the device, you can control up to 20 functions using a single button. iON KNX push-button sensors stand out from the crowd thanks to their extensive functionality and exceptional ease of use. The iON 108 KNX room controller with LCD and integrated room thermostat features a Bluetooth interface to make it easier to use. All push-button sensors come with an integrated bus coupling and can be programmed without the ETS app.



### iON 102 KNX

Push-button sensor with two operating points and temperature sensor. Switch light on and dim light, control blinds, initiate and save scenes, measure temperature, manage colours, show status (multicolour LED)



### iON 104 KNX

Double push-button sensor with four operating points and temperature sensor. Switch light on and dim light, control blinds, initiate and save scenes, measure temperature, manage colours, show status (multicolour LED)



### iON 108 KNX

KNX room controller with 20 functions, LC display, room thermostat, app operation and two operating points. Switch light on and dim light, control blinds, initiate and save scenes, control temperature, manage colours, show status (LC display), Bluetooth interface for using the app via smartphone or tablet

[Product information on page 28](#)



# Secure wireless communication via KNX Data Secure KNX flush-mounted wireless actuators

## Highlights

### Secure communication

The encryption according to KNX Data Secure standard effectively prevents interpretation of the sent data

### Wide range of applications

Depending on device, can be used for dimming (DU 1 RF KNX), for blinds/shading control (JU 1 RF KNX), for switching loads with high inrush currents (SU 1 RF KNX) or for heating control (HU 1 RF KNX)

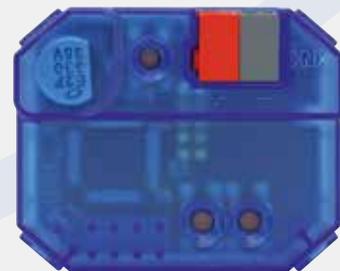
### Quick installation

Thanks to their compact design, the KNX flush-mounted wireless actuators fit into any switch/junction box

### Flexible integration

With 2 external inputs for connecting a button, signal contact or temperature sensor

With its new wireless actuators that comply with the KNX standard „KNX RF1.R S-Mode“, Theben offers a practical option to expand existing KNX systems in buildings without the need to invest much time or effort. In this way, extensions to buildings or functions can be easily integrated into the system at a later date.



Thanks to the media coupler, you can easily link wired and wireless components. Buttons, window contacts and temperature sensors can be directly integrated via the inputs of the flush-mounted actuators.

**Speaking of safety:** Communication between wireless actuators and lighting, blinds and heating is, of course, encrypted. That leaves no opportunities open for data theft or tampering.



Theben AG is expanding its range of KNX RF products with new KNX RF flush-mounted actuators and media couplers. Thanks to encryption with KNX Data Secure, communication is optimally protected against interception and tampering.

DU1 RF KNX dimming actuator



HU1 RF KNX heating actuator



SU1 RF KNX switch actuator



TU 4 RF KNX wireless button interface



JU1 RF KNX blind actuator



Product information on page 24

# Home and building control

## Smart Home system LUXORliving, Flush-mounted actuators



### Description

#### Common functions

- 1-way flush-mounted actuator LUXORliving
- Easy installation due to the compact housing
- 2 binary inputs for floating contacts such as buttons, switches, temperature sensor (I2)
- Integrated temperature monitoring for increased operating safety, e.g. in the event of overload

#### LUXORliving D1

- 1-way flush-mounted dimming actuator
- Optimised dimming output for dimmable energy-saving lamps, LEDs, incandescent and halogen lamps, and dimmable transformers
- Easy to adapt to different lamps thanks to automatic load detection

- Adjustable dimming curve for precise and flicker-free dimming
- The binary inputs are assigned to the dimming output as standard (function test before programming)

#### LUXORliving J1

- 1-way flush-mounted blind actuator
- For controlling drives for blinds, roller blinds, sun and vision protection devices, skylights, and ventilation flaps
- The binary inputs are assigned to the output as standard (function test before programming)

#### LUXORliving S1

- 1-way flush-mounted switching actuator
- 1x NO contact & 1x NC contact with common control
- Adjustable features: NC/NO contact, switching, delayed switching, pulse function
- The binary inputs are assigned to the switch output as standard (function test before programming)

#### LUXORliving H1

- 1-way flush-mounted heating actuator
- Noiseless control of thermal actuators 230 V AC
- Integrated temperature controller heating/cooling
- Valve protection function

### Product selection

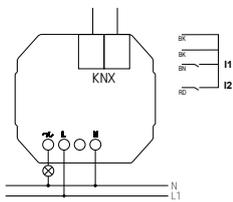
Number of channels	Type	Article number
1	LUXORliving D1	4800570
1	LUXORliving J1	4800550
1	LUXORliving S1	4800520
1	LUXORliving H1	4800540 *

\* Available june 2020

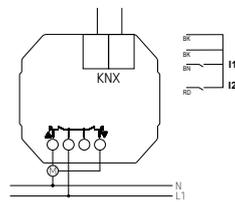
### Technical data

	LUXORliving D1	LUXORliving J1	LUXORliving S1	LUXORliving H1
Operating voltage KNX	Bus voltage, $\leq 4$ mA			
Energy saving lamps	-		300 W	-
LED lamp < 2 W	Trailing edge (RC-mode): typ. 250 W	-	50 W	-
LED lamp > 2 W (typ.)	Trailing edge (RC-mode): 250 W	-	600 W	-
Inrush current	-		max. 740 A / 200 $\mu$ s	-
Switching capacity	-	10 A	16 A	max. 1 A or 4 actuators 230 V AC (ALPHA 5)
Ambient temperature	-5 °C ... +45 °C			
Protection class	II			

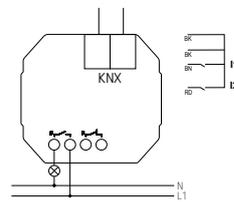
### Connection examples



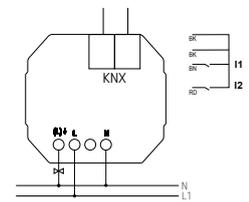
LUXORliving D1



LUXORliving J1



LUXORliving S1



LUXORliving H1

### Accessories



Temperature sensor RAMSES  
IP 65  
↳ Art.No.: 9070459



Temperature sensor  
↳ Art.No.: 9070321

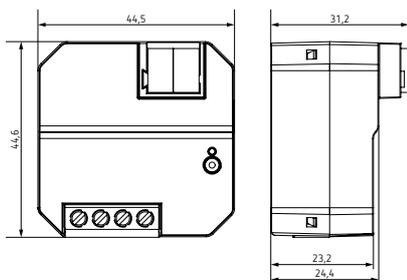


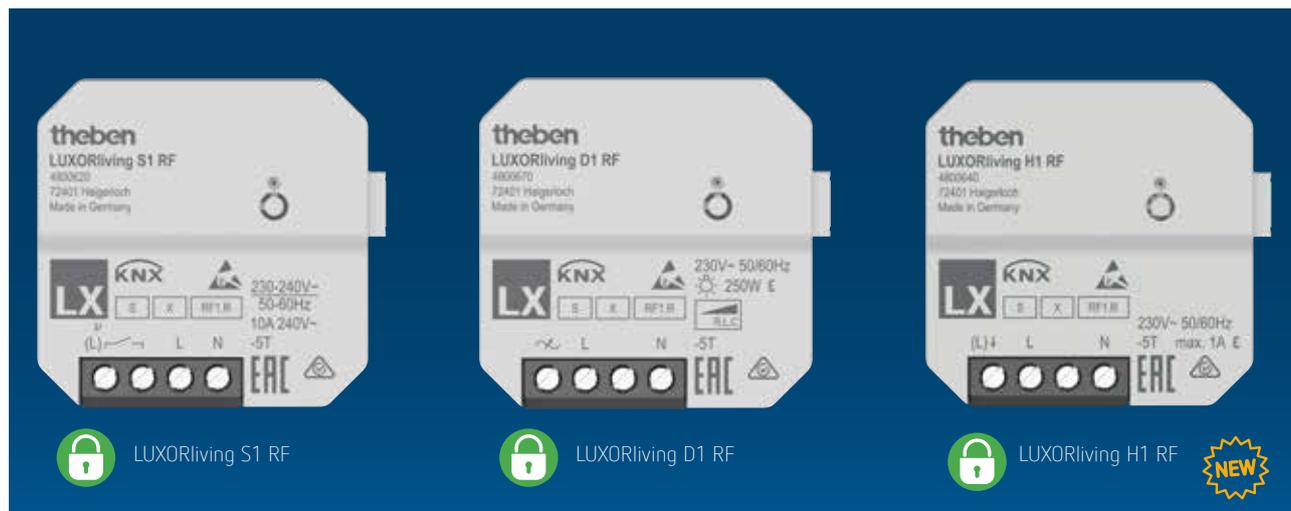
Flush-mounted temperature  
sensor  
↳ Art.No.: 9070469



Actuator ALPHA 5 230 V  
for LUXORliving H1  
↳ Art.No.: 9070441

### Scale drawings





LUXORliving S1 RF



LUXORliving D1 RF



LUXORliving H1 RF



## Description

### Common functions

- 1-way wireless flush-mounted actuator LUXORliving
- Encrypted wireless communication
- Easy installation due to the compact housing
- 2 binary inputs for floating contacts such as buttons, switches, temperature sensor (I2)
- Integrated temperature monitoring for increased operating safety, e.g. in the event of overload

### LUXORliving S1 RF

- 1-way wireless flush-mounted switch actuator
- Adjustable features: NC/NO contact, switching, delayed switching, pulse function
- The binary inputs are assigned to the switch output as standard (function test before programming)

### LUXORliving D1 RF

- 1-way wireless flush-mounted dimming actuator
- Optimised dimming output for dimmable energy-saving lamps, LEDs, incandescent and halogen lamps, and dimmable transformers.
- Easy to adapt to different lamps thanks to automatic load detection
- Adjustable dimming curve for precise and flicker-free dimming
- The binary inputs are assigned to the dimming output as standard (function test before programming)

### LUXORliving J1 RF

- 1-way wireless flush-mounted blind actuator
- For controlling drives for blinds, roller blinds, sun and vision protection devices, skylights, and ventilation flaps
- Integrated automatic ventilation function
- The binary inputs are assigned to the output as standard (function test before programming)

### LUXORliving H1 RF

- 1-way wireless flush-mounted heating actuator LUXORliving
- Noiseless control of thermal actuators 230 V AC
- Integrated temperature controller heating/cooling
- Valve protection function

## Product selection

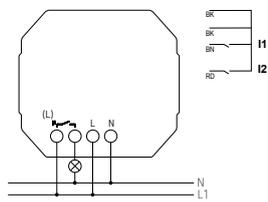
Configuration type	Number of channels	Type	Article number
Switch actuator	1	LUXORliving S1 RF	4800620
Dimming actuator	1	LUXORliving D1 RF	4800670
Blind actuator	1	LUXORliving J1 RF	4800650
Heating actuator	1	LUXORliving H1 RF	4800650 *

\* Available june 2020

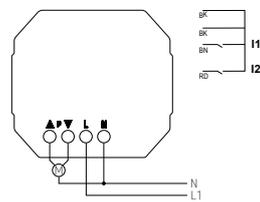
### Technical data

	LUXORliving S1 RF	LUXORliving D1 RF	LUXORliving J1 RF	LUXORliving H1 RF
Operating voltage	230–240 V AC	230 V AC	230–240 V AC	230 V AC
Frequency	50–60 Hz			
Switching capacity	10 A	–	5 A	max. 1 A or 4 actuators 230 V AC (ALPHA 5)
Incandescent/halogen lamp load	1800 W	250 W	–	–
LED lamp (typ.)	600 W	Trailing edge (RC-mode): 250 W	–	–
Ambient temperature	–5 °C... +45 °C			
Protection rating	IP 20			
Protection class	II			

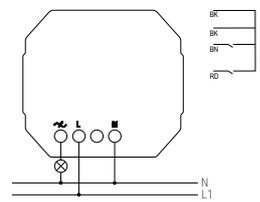
### Connection examples



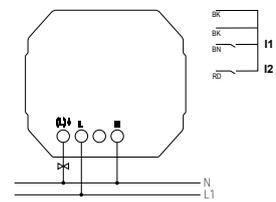
LUXORliving S1 RF



LUXORliving J1 RF



LUXORliving D1 RF



LUXORliving H1 RF

### Accessories



Temperature sensor RAMSES  
IP 65  
↳ Art.No.: 9070459



Temperature sensor  
↳ Art.No.: 9070321

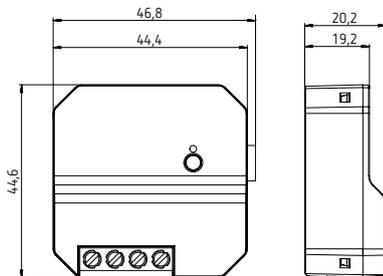


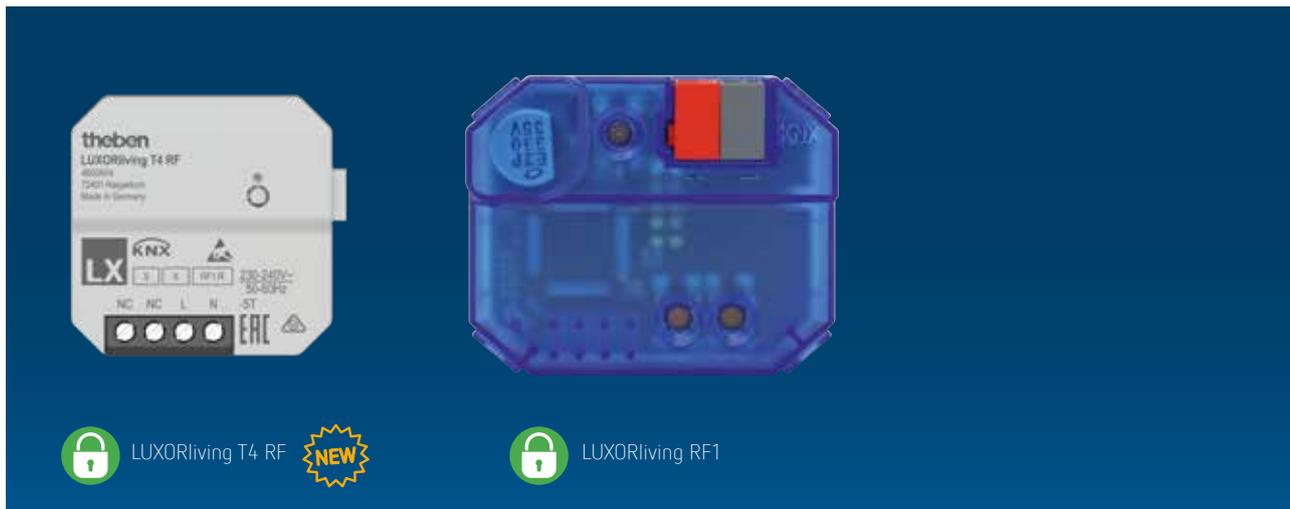
Flush-mounted temperature  
sensor  
↳ Art.No.: 9070469



Actuator ALPHA 5 230 V  
for LUXORliving H1 RF  
↳ Art.No.: 9070441

### Scale drawings





### Description

#### LUXORliving T4 RF

- 1-way flush-mounted wireless push-button interface
- Encrypted wireless communication
- 4 binary inputs for potential-free buttons and signaling contacts
- 1 additional input for temperature sensor
- Free assignment of the functions switching, dimming, blinds, temperature measurement and transmission
- Easy installation due to the compact housing
- Can be used with 4-way push-button module (9070806)

#### LUXORliving RF1

- Connects LUXORliving RF devices of a radio line with the twisted-pair bus
- Power supply via KNX bus voltage
- Supports long frames for „KNX Secure“ and enables faster download of large applications in parallel
- Ranges of max. 30 m within the building are possible
- Has a repeater function, i.e. received telegrams are sent again to increase the range

### Product selection

Type	Article number
LUXORliving T4 RF	4800604 *
LUXORliving RF1	4800868

\* Available june 2020

### Technical data

	LUXORliving T4 RF	LUXORliving RF1
Operating voltage	230–240 V AC	Bus voltage
Frequency	50–60 Hz	–
Stand-by consumption	< 0,4 W	–
Length connecting wires	25 cm	–
Interface extension max.	3 m	–
Ambient temperature	–5 °C ... +45 °C	
Protection class	II	III

### Accessories



**Flush-mounted temperature sensor**

↳ Art.No.: 9070469

#### 4-way push-button module

↳ Art.No.: 9070806

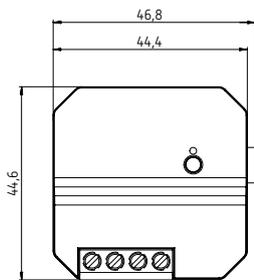
For LUXORliving T4 RF, with integrated temperature sensor

#### Cover frame

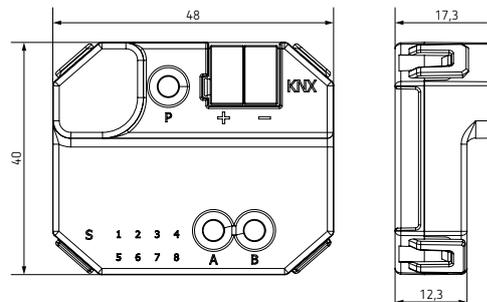
↳ Art.No.: 9070788-9070792

For 4-way push-button module, for common switch ranges

### Scale drawings



LUXORliving T4 RF



LUXORliving RF1



### Description

#### LUXORliving iON2

- Push-button sensor with 2 buttons and 2 status LEDs with integrated temperature sensor
- For controlling of the functions switching, dimming, blinds, scene in the LUXORliving system
- Multi-colored status LEDs
- Automatic brightness control of the status LEDs depending on the ambient brightness
- Integrated temperature sensor for room temperature control with LUXORliving heating actuators
- Transparent cover for individual labeling in the scope of delivery
- Installation of two ION push-button sensors on standard double socket with accessory 9070822 possible (standard combination distance 71 mm)

#### LUXORliving iON4

As LUXORliving iON2, but:

- Push-button sensor with 4 buttons and 4 status LEDs with integrated temperature sensor

#### LUXORliving iON8

- Room controller with integrated room temperature controller
- LC display for displaying functions, icons and values
- 10 freely parameterizable functions
- Display of various icons for the respective functions
- For controlling of the functions switching, dimming, blinds, scene, temperature control in the LUXORliving system
- Automatic brightness control of the display depending on the ambient brightness

- Installation of two ION push-button sensors on standard double socket with accessory 9070822 possible (standard combination distance 71 mm)

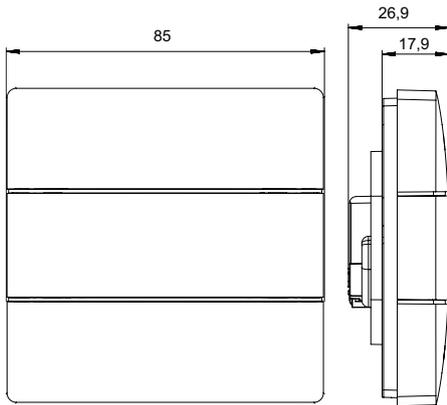
### Product selection

Type	Article number
LUXORliving iON2	4800412
LUXORliving iON4	4800414
LUXORliving iON8	4800418

### Technical data

	LUXORliving iON
Operating voltage	Bus voltage, $\leq 12,5$ mA
Ambient temperature	$-5$ °C ... $+45$ °C
Type of protection	IP 20
Protection class	III

### Scale drawings



### Accessories

#### 2-way mounting plate ION

↳ Art.No.: 9070822

# Home and building control

## Smart Home system LUXORliving, Weather station



### Description

#### LUXORliving M100

- Weather sensor for use with the weather station LUXORliving M130
- Forwarding of the measured values to up to 20 weather stations LUXORliving M130
- For measuring wind, rain, temperature and brightness (3 directions)
- Rain sensor with integrated heating

#### LUXORliving M130

- Weather station for use with the weather sensor LUXORliving M100
- Receiving and evaluating the measured values from a LUXORliving M100 weather sensor
- Evaluation of wind, rain, temperature and brightness (3 directions)
- For fully automatic blinds and sun protection control
- Sun protection for up to 4 facades
- Display of weather data e.g. with LUXORliving app „LUXORplay“

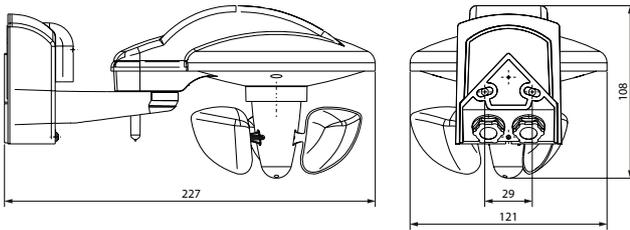
### Product selection

Type	Type	Article numer.
Weather sensor	LUXORliving M100	4800491
Weather station	LUXORliving M130	4800492

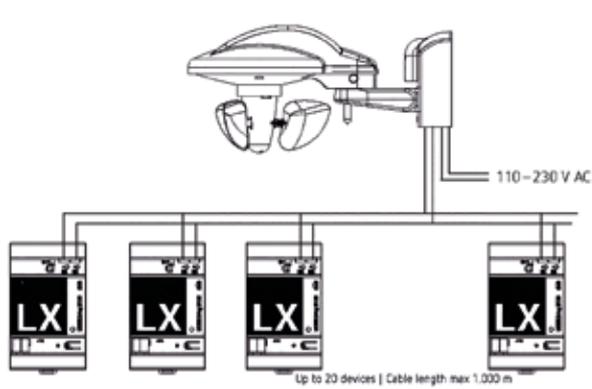
### Technical data

	LUXORliving M100	LUXORliving M130
Operating voltage	110–230 V AC	–
Frequency	50–60 Hz	–
Operating voltage KNX	–	Bus voltage, < 20 mA
Stand-by consumption	< 5 W	< 0,5 W
Width	–	4 modules
Measuring range brightness	1–100.000 lx	–
Measuring range temperature	–30 °C ... +60 °C	–
Measuring range wind speed	2–30 m/s	–
Ambient temperature	–20 °C ... +55 °C	–
Type of protection	II	II
Protection class	IP 44	IP 20

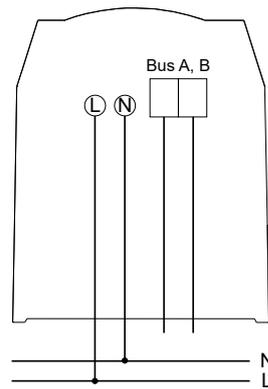
### Scale drawings



### Connection diagrams



LUXORliving M100



LUXORliving M130

### Accessories

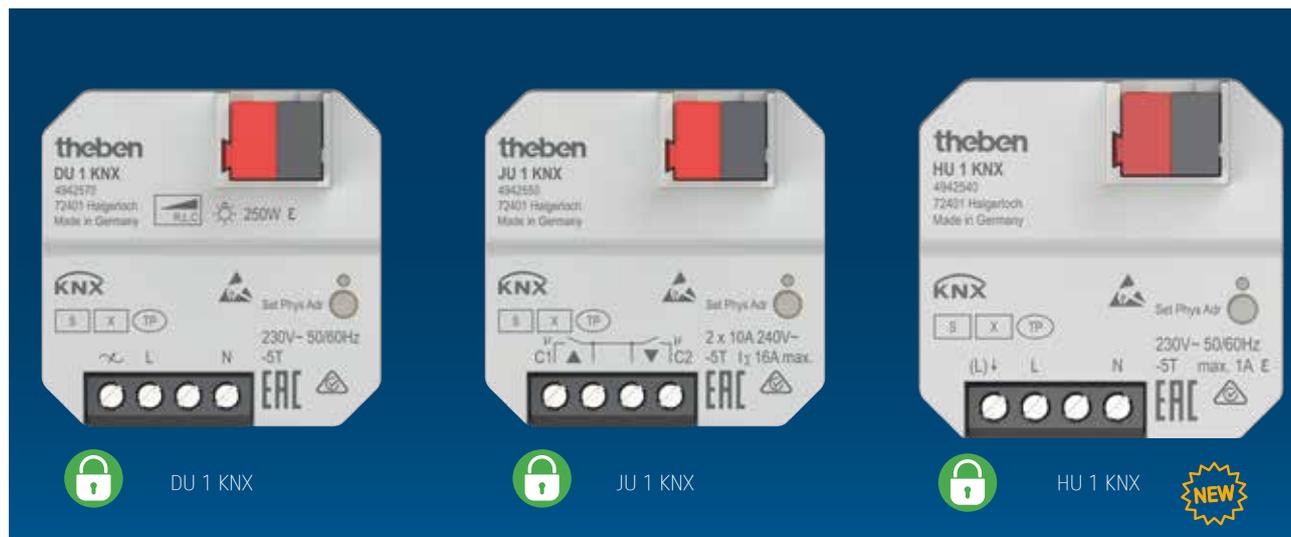


Mast fixing S

↳ Art.No: 9070928

# Home and building control

## KNX, Flush-mounted actuators



### Description

#### Common functions

- 1-way flush-mounted actuator
- Secure communication via with support of „KNX Data Secure“
- Easy installation due to the compact housing
- 2 binary inputs for floating contacts such as buttons, switches, window contacts, temperature sensor (I2)
- Integrated temperature monitoring for increased operating safety, e.g. in the event of overload

#### SU 1 KNX

- 1-way flush-mounted switching actuator
- 1x NO contact & 1x NC contact with common control
- Adjustable features: NC/NO contact, switching, delayed switching, pulse function
- The binary inputs are assigned to the switch output as standard (function test before programming)

#### JU 1 KNX

- 1-way flush-mounted blind/switching actuator
- For controlling drives for blinds, roller blinds, sun and vision protection devices, skylights, and ventilation flaps
- Integrated automatic ventilation function
- Flexible configuration options: blind actuator or 2-channel switch actuator
- The binary inputs are assigned to the output as standard (function test before programming)

#### DU 1 KNX

- 1-way flush-mounted dimming actuator
- Optimised dimming output for dimmable energy-saving lamps, LEDs, incandescent and halogen lamps, and dimmable transformers
- Easy to adapt to different lamps thanks to automatic load detection

- Adjustable dimming curve for precise and flicker-free dimming
- The binary inputs are assigned to the dimming output as standard (function test before programming)

#### HU 1 KNX

- 1-way flush-mounted heating actuator
- Noiseless control of thermal actuators 230 V AC
- Function selection as a heating actuator (continuous or switching) or as a heating controller (integrated temperature controller heating/cooling)
- Valve protection function and summer function

### Product selection

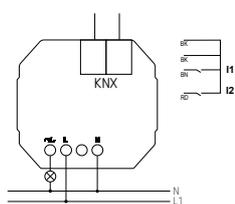
Number of channels	Funktionsart	Type	Article number
1	Flush-mounted switching actuator	SU 1 KNX	4942520
	Flush-mounted blind/switching actuator	JU 1 KNX	4942550
	Flush-mounted dimming actuator	DU 1 KNX	4942570
	Flush-mounted heating actuator	HU 1 KNX	4942540 *

\* Available june 2020

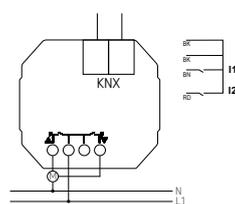
## Technical data

	DU 1 KNX	JU 1 KNX	SU 1 KNX	HU 1 KNX
Operating voltage KNX	Bus voltage, $\leq 4$ mA			
Energy saving lamps	-		300 W	-
LED lamp < 2 W (typ.)	Trailing edge (RC-mode): 250 W	-	50 W	-
LED lamp > 2 W (typ.)	Trailing edge (RC-mode): 250 W	-	600 W	-
Switching capacity	-	10 A	16 A	max. 1 A or 4 actuators 230 V AC (ALPHA 5)
Ambient temperature	-5 °C ... +45 °C			
Protection class	II			

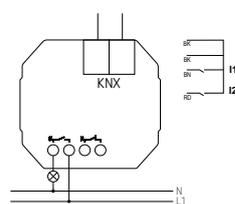
## Connection examples



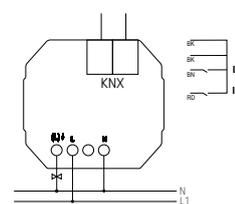
DU 1 KNX



JU 1 KNX



SU 1 KNX



HU 1 KNX

## Accessories



Temperature sensor RAMSES  
IP 65

↳ Art.No.: 9070459



Temperature sensor

↳ Art.No.: 9070321



Flush-mounted temperature  
sensor

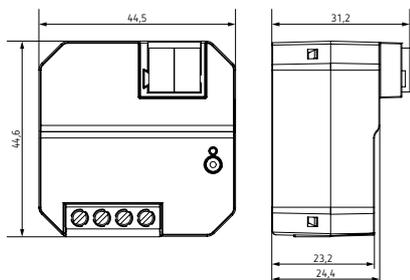
↳ Art.No.: 9070469



Actuator ALPHA 5 230 V  
for HU 1 KNX

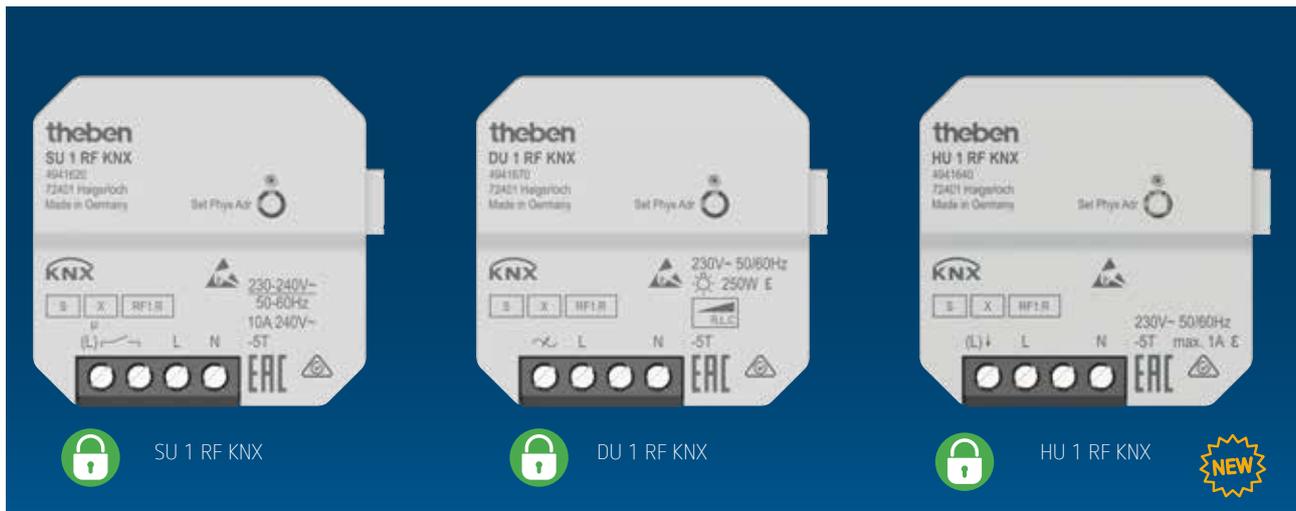
↳ Art.No.: 9070441

## Scale drawings



# Home and building control

## KNX, Flush-mounted actuators



### Description

#### Common functions

- 1-way wireless flush-mounted actuator
- Secure communication via KNX-RF with support from KNX Data Secure
- Easy installation due to the compact housing
- 2 binary inputs for floating contacts such as buttons, switches, temperature sensor (I2)
- Integrated temperature monitoring for increased operating safety, e.g. in the event of overload

#### SU 1 RF KNX

- 1-way wireless flush-mounted switch actuator
- Adjustable features: NC/NO contact, switching, delayed switching, pulse function
- The binary inputs are assigned to the switch output as standard (function test before programming)

#### DU 1 RF KNX

- 1-way wireless flush-mounted dimming actuator
- Optimised dimming output for dimmable energy-saving lamps, LEDs, incandescent and halogen lamps, and dimmable transformers.
- Easy to adapt to different lamps thanks to automatic load detection
- Adjustable dimming curve for precise and flicker-free dimming
- The binary inputs are assigned to the dimming output as standard (function test before programming)

#### JU 1 RF KNX

- 1-way wireless flush-mounted blind actuator
- For controlling drives for blinds, roller blinds, sun and vision protection devices, skylights, and ventilation flaps

- Integrated automatic ventilation function
- The binary inputs are assigned to the output as standard (function test before programming)

#### HU 1 RF KNX

- 1-way wireless flush-mounted heating actuator
- Silent control of 230 V AC thermal actuators
- Integrated heating/cooling temperature controller
- Valve protection function

### Product selection

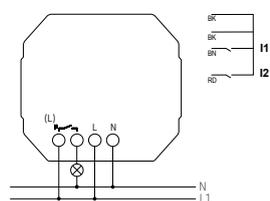
Configuration type	Number of channels	Type	Article number
Switch actuator	1	SU 1 RF KNX	4941620
Dimming actuator	1	DU 1 RF KNX	4941670
Blind actuator	1	JU 1 RF KNX	4941650
Heating actuator	1	HU 1 RF KNX	4941640 *

\* Available june 2020

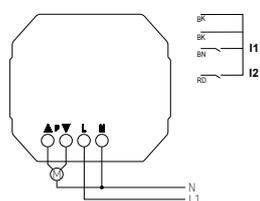
## Technical data

	SU 1 RF KNX	DU 1 RF KNX	JU 1 RF KNX	HU 1 RF KNX
Operating voltage	230–240 V AC	230 V AC	230–240 V AC	230 V AC
Frequency	50–60 Hz			
Switching capacity	10 A	–	5 A	max. 1 A or 4 actuators 230 V AC (ALPHA 5)
Incandescent/halogen lamp load	1800 W	250 W	–	–
LED lamp (typ.)	600 W	Trailing edge (RC-mode): 250 W	–	–
Ambient temperature	–5 °C... +45 °C			
Protection rating	IP 20			
Protection class	II			

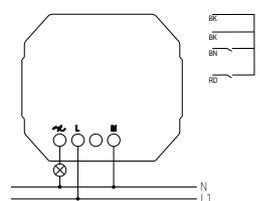
## Connection examples



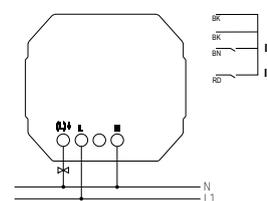
SU 1 RF KNX



JU 1 RF KNX



DU 1 RF KNX



HU 1 RF KNX

## Accessories



Temperature sensor RAMSES  
IP 65  
↳ Art.No.: 9070459



Temperature sensor  
↳ Art.No.: 9070321

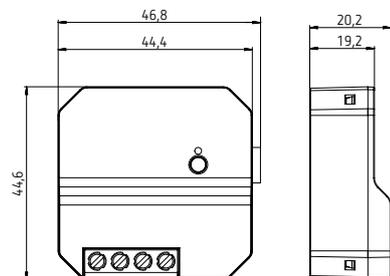


Flush-mounted temperature  
sensor  
↳ Art.No.: 9070469



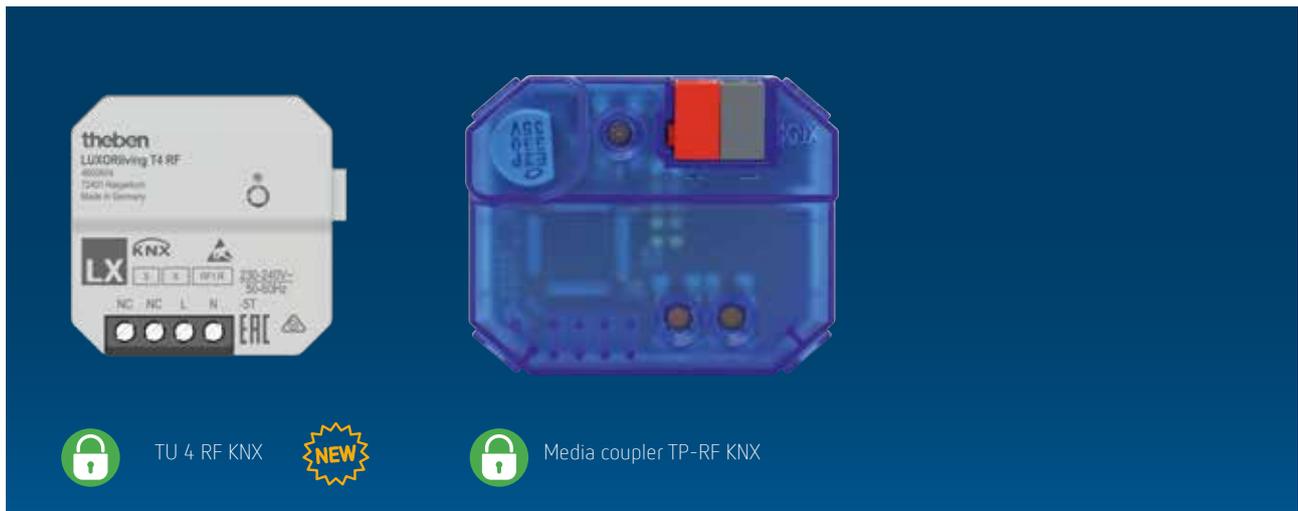
Actuator ALPHA 5 230 V  
for HU 1 RF KNX  
↳ Art.No.: 9070441

## Scale drawings



# Home and building control

## KNX, Binary inputs/Media coupler



### Description

#### TU 4 RF KNX

- 1-way flush-mounted wireless push-button interface
- Secure communication via with support of „KNX Data Secure“
- 4 binary inputs for potential-free buttons and signaling contacts
- 1 additional input for temperature sensor
- Free assignment of the functions switching, dimming, blinds, temperature measurement and transmission
- Easy installation due to the compact housing
- Can be used with 4-way push-button module (9070806)

#### Media coupler TP-RF KNX

- Connects KNX RF devices of a radio line with the twisted-pair bus
- Power supply via KNX bus voltage
- Supports long frames for „KNX Secure“ and enables faster download of large applications in parallel
- Ranges of max. 30 m within the building are possible
- Has a repeater function, i.e. received telegrams are sent again to increase the range

### Product selection

Type	Article number
TU 4 RF KNX	4961604 *
Media coupler TP-RF KNX	9070868

\* Available june 2020

### Technical data

	TU 4 RF KNX	Media coupler TP-RF KNX
Operating voltage	230–240 V AC	Bus voltage
Frequency	50–60 Hz	–
Stand-by consumption	< 0,4 W	–
Length connecting wires	25 cm	–
Interface extension max.	3 m	–
Ambient temperature	–5 °C ... +45 °C	
Protection class	II	III

### Accessories



Flush-mounted temperature sensor

↳ Art.No.: 9070469

#### 4-way push-button module

↳ Art.No.: 9070806

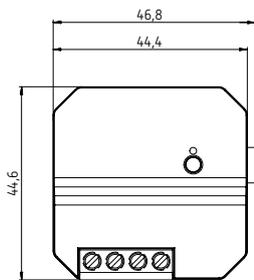
For TU 4 RF KNX, with integrated temperature sensor

#### Cover frame

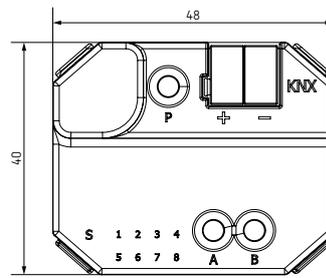
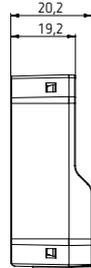
↳ Art.No.: 9070788-9070792

For 4-way push-button module, for common switch ranges

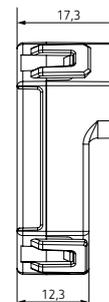
### Scale drawings



TU 4 RF KNX



Media coupler TP-RF KNX



# Home and building control

## KNX, Push-button sensors



### Description

#### ION 102 KNX

- Push-button sensor with 2 buttons and 2 status LEDs with integrated temperature sensor
- Secure communication via KNX-RF with support of „KNX Data Secure“
- For controlling of the functions switching, dimming, blinds, value transmitter, operating mode, scene, color control, sequence
- Up to 3 different telegrams per button
- Sending different telegrams with a short, long or double click
- Multi-colored status LEDs with adjustable colors for each LED separately
- Behavior of each status LED can be set: static, flashing or pulsing
- Brightness of each status LED can be individually adjusted via object or parameter
- Automatic brightness control of the status LEDs depending on the ambient brightness

- Integrated temperature sensor for visualization and temperature control via heating actuators
- Function monitoring via object (signaling dismantling)
- Installation of two ION push button sensors on standard double socket with accessories 9070822 possible
- Transparent cover for individual labeling in the scope of delivery

#### ION 104 KNX

As ION 102 KNX, but:

- Push-button sensor with 4 buttons and 4 status LEDs

#### ION 108 KNX

- Room controller with integrated bus unit
- Secure communication via KNX-RF with support of „KNX Data Secure“
- Access to the room controller via Bluetooth and operation with the IONplay app

- LC display for displaying functions, icons and values
- Integrated temperature controller for regulating and controlling the operating mode, temperature and fan level
- 20 freely parameterizable functions
- Free assignment of icons to the functions (40 icons to choose from)
- For controlling of the functions switching, dimming, blinds, value transmitter, operating mode, scene, color control, sequence
- Display brightness individually adjustable via object or parameter
- Automatic brightness control of the display depending on the ambient brightness
- Function monitoring via object (signaling dismantling)
- Installation of two ION push button sensors on standard double socket with accessories 9070822 possible

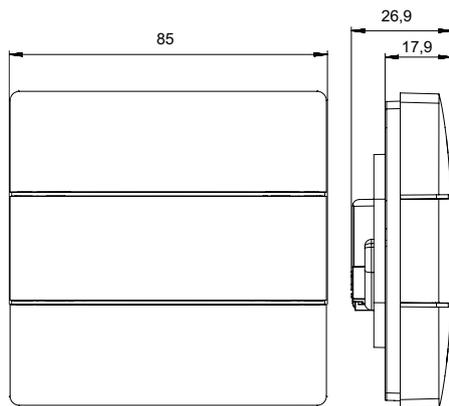
### Product selection

Type	Article number
iON 102 KNX	4969232
iON 104 KNX	4969234
iON 108 KNX	4969238

### Technical data

	iON KNX
Operating voltage	Bus voltage, $\leq 12,5$ mA
Ambient temperature	$-5$ °C ... $+45$ °C
Type of protection	IP 20
Protection class	III

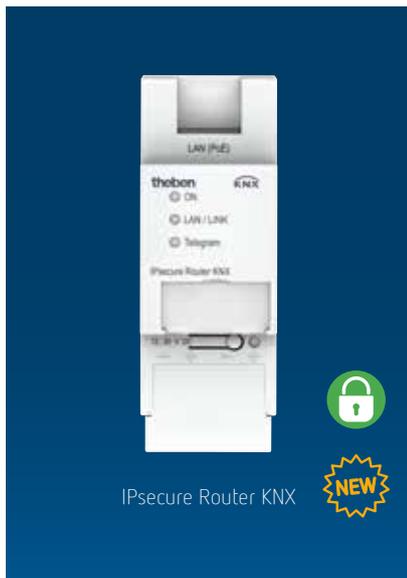
### Scale drawings



### Accessories

#### 2-way mounting plate ION

↳ Art.No.: 9070822



### Description

- Router / interface / line coupler IP and KNX
- For data exchange between KNX and IP networks
- Support of KNX IP Secure
- Meets the requirements of the KNXnet / IP standard
- Complete filter table for all main groups (0... 31)
- Display of power failures on the bus (KNX IP Service)
- Unicast: Up to 10 devices can communicate via unicast
- Tunneling: 5 tunneling servers available (visualization, app ...)
- Firmware update possible (Theben IP Tool Software)
- Power supply: 12–30 V DC / PoE - IEEE 802.3af class 1

### Product selection

Type	Article number
IPsecure Router KNX	9070770

### Technical data

	IPsecure Router KNX
Operating voltage KNX	Bus voltage, ≤10 mA
Operating voltage	12–30 V DC
Width	2 modules
Ambient temperature	-5 °C ... +45 °C
Protection class	II according to EN 60 730-1
Type of protection	IP 20



### Description

- Digital time switch / astro time switch with weekly program and annual program
- With integrated webserver, can be controlled via LAN/smartphone
- 4 channels
- 800 memory programs
- Channel 1 to 4 can be switched over as time or astro time switch program
- 3 special programs per channel: switching program / astro program; Duration Off; Duration Each with year date function
- Local holidays, fixed date ranges, recurring date ranges and Easter-themed holidays
- Astro times with other night interruption/ fixed ON circuit
- Permanent ON or OFF switching via LAN switchable
- Pulse program
- Automatic summer winter time change-over Europe; Canada; UNITED STATES; Iran, Australia and freely definable
- Deactivate summer /winter time change over
- Hour counter

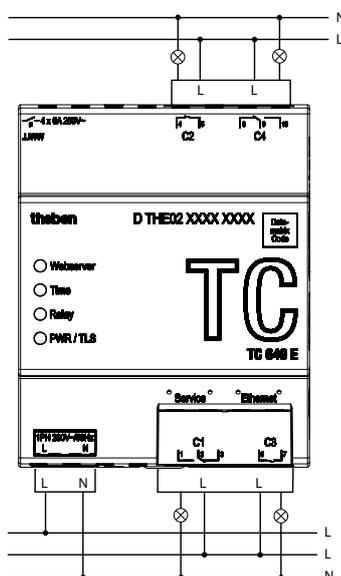
### Product selection

Type	Article number
TC 649 E	6490130

### Technical data

	TC 649 E
Operating voltage	230 V AC
Frequency	50 – 60 Hz
Width	4 modules
Installation type	DIN rail
Switching capacity at 250 V AC, $\cos \varphi = 1$	6 A
Stand-by consumption	3 W
Type of protection	IP 30
Protection class	II according to EN 60 730-1
Ambient temperature	-25 °C ... +55 °C

### Connection diagram



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