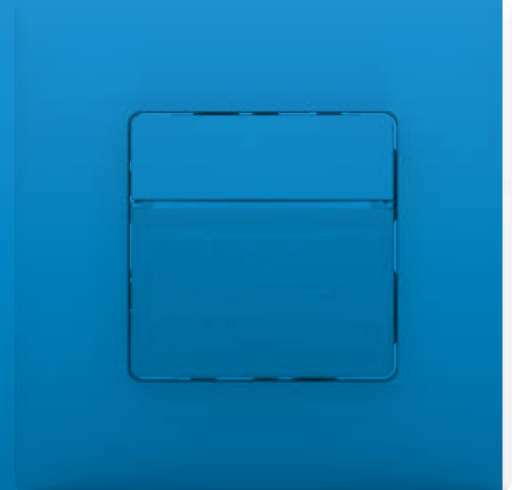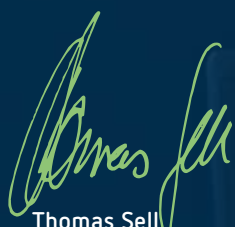# theben

Highlights #01 | 2023

Thomas Sell
Chief Sales Officer

Paul Sebastian Schwenk
Chairman of the Board of Management

Dear customers and partners,

Since the invention of the staircase light timer switch in 1921, Theben has been dedicated to saving energy in buildings and to developing products that use energy efficiently − without sacrificing any comfort.

Then as now, we are helping to reduce the building industry's enormous energy demand and CO_2 emissions. The focus is always on people as users and as the central factor in solving the energy and climate crisis. We call it „Human Centered Building Automation".

You will find many examples of it in this brochure or on our website: **www.theben.de/energysaving**

Enjoy reading. We look forward to continuing our trustful cooperation and wish you a successful 2023.

Michael Matthesius
Chief Technology Officer

Contents

More information at www.theben.co.uk

The full program
for the intelligent buildings of tomorrow
Products, solutions and systems

LX

Smart Home system

KNX

Home and building control
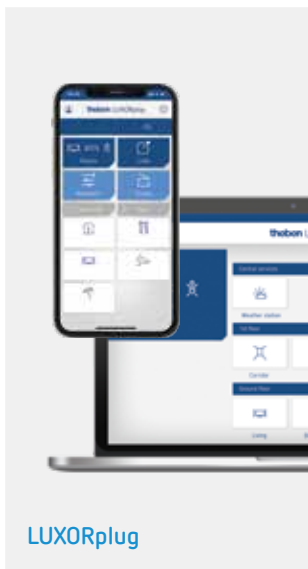
Weather station

Actuator technology

Weather station

Actuator technology
Gateways
(KNX, DALI)

Operating controls
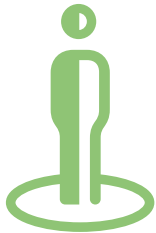
LUXORplug

Operating controls

Presence detectors
Motion detectors

Presence & motion detectors, lighting

Since 2007, more from page 16

Motion detectors
(230 V, KNX)

Presence detectors
(230 V, KNX, DALI-2)
Presence sensors
(DALI-2)

LED lights
(with and without detectors,
can also be controlled remotely via an app)
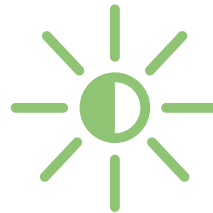
Time, light & climate control

Since 1921, more from page 20

Time switches
Staircase time switches
Latching relays

Twilight switches

Dimmers

Thermostats
CO$_2$ sensors

Upgrade from LUXOR to LUXORliving
Easy system change with
LUXORliving J4-6 blind actuator

NEW

The new blind actuator LUXORliving J4-6 now enables a simple upgrade of the control of existing LUXOR systems to LUXORliving - without rewiring.

Like its predecessors LUXOR 408 S and 409 S, the actuator has 8 relay outputs for 4 drives (up/down), 4 inputs for individual operation of the drives (230 V) and 2 inputs for central and group operation (230 V). The special feature of the inputs is the differentiation between full and half wave and the resulting compatibility with existing diode modules of the LUXOR home comfort control. The blind actuator LUXORliving J4-6 has the same installation width as the predecessor devices.

Goodbye LUXOR

Hello LUXORliving!

→ 8 relay outputs for 4 drives (up/down)

→ 4 inputs for individual operation

→ 2 inputs for central and group operation

→ Minimum installation effort

Frequently asked questions about replacing LUXOR can be found at: :
www.luxorliving.co.uk/for-professionals/
replacing-the-luxor-system

LUXORliving J4-6

Description

- 4-way LUXORliving blind actuator
- With integrated inputs for the push buttons, as a replacement for drive control of the LUXOR living comfort control
- Allows an easy system change for existing LUXOR customers to LUXORliving
- For controlling drives for blinds, roller blinds, as well as sun and vision protection devices
- Manual operation on the device (even without bus voltage)
- LED Up and Down switching status indicator for each channel

- Features:
  - 8 relay outputs for 4 drives (Up / Down)
  - 4 inputs for individual operation of the drives (230 V)
  - 2 inputs for central and group operation (230 V)
- The relay outputs are not floating or potential-independent, but are powered by the supply voltage
- This means that all drives connected to the actuator are controlled via the same phase. This has to be considered when changing from LUXOR to LUXORliving.

Product selection

Type	Item no.
LUXORliving J4-6	4800451 *

Technical data

	LUXORliving J4-6
Operating voltage	230 V AC
Standby output	< 0.2 W
Width	4 modules
Type of contact	NO contact, 6 A (cos φ = 1)
Ambient temperature	−5 °C … +45 °C
Protection rating	IP 20
Protection class	II

Connection example
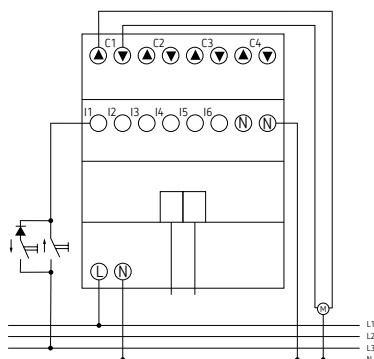
* Available may 2023

LUXORliving AC IR1 Split Unit Gateway
Efficient control of
Air-conditioning split devices via app

NEW

The LUXORliving AC IR1 split unit gateway forms the interface between the LUXORliving Smart Home System and air-conditioning split units, e.g. in residential buildings, hotels, offices and industrial and functional buildings. The transmitting unit of the cable is glued to the receiver unit of the split unit. The unit can be installed in a flush-mounted or surface-mounted box - without additional auxiliary voltage. .

The Split Unit Gateway can be easily programmed with the LUXORplug Windows software. There are currently over 500 Split Unit devices/remote controls from many manufacturers are currently available. This database is updated regularly. All relevant functions of the climate split unit can be used via the LUXORplay app and with scenes. In addition, the split unit device can be switched on and off via all LUXORliving buttons.

LUXORliving AC IR1

Description

- Split Unit Gateway LUXORliving for controlling climate split devices using LUXORliving
- Easy to set up IR gateway with large database of split unit devices
- Currently, over 500 different split unit devices / remote controls are available in the database and can be controlled via LUXORliving
- The database is regularly expanded

Product selection

Type	Item no.
LUXORliving AC IR1	4800320 *

Technical data

	LUXORliving AC IR1
Operating voltage KNX	Bus voltage, max. 12 mA
Type of installation	In flush / surface-mounted box
Cable length of IR transmitter	2 m
Ambient temperature	−5 °C ... +45 °C
Protection class	III
Protection rating	IP 20

* Available june 2023

Diversified
Product family
Complete and modular

KNX

Building automation

LX

Smart home
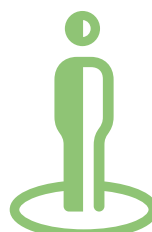
230 V

KNX motion detector theMura S180 KNX UP
with integrated push button
1 x light channel
1 x presence channel
3 logic channels

Motion detector LUXORliving BI180
with integrated push button
1 x light channel
Temperature sensor

3-wire motion detector
1 x light channel
theMura S180-100 UP
with Theben frame
theMura S180-100 B UP
without cover

3-wire presence detector
1 x light channel
1 x presence channel
Orientation light
Acoustic sensor
theMura S180-101 UP
with Theben frame
theMura S180-101 B UP
without cover

theMura S180-101 2.20 UP WH
with Theben frame
(2.2 m installation height)

NEW

KNX presence detectors theMura P180 KNX UP
with integrated push button
2 x light channel
2 x presence channel
6 logic channels
Orientation light, temperature and acoustic sensor, push button interface

theMura P180 2.20 KNX UP WH
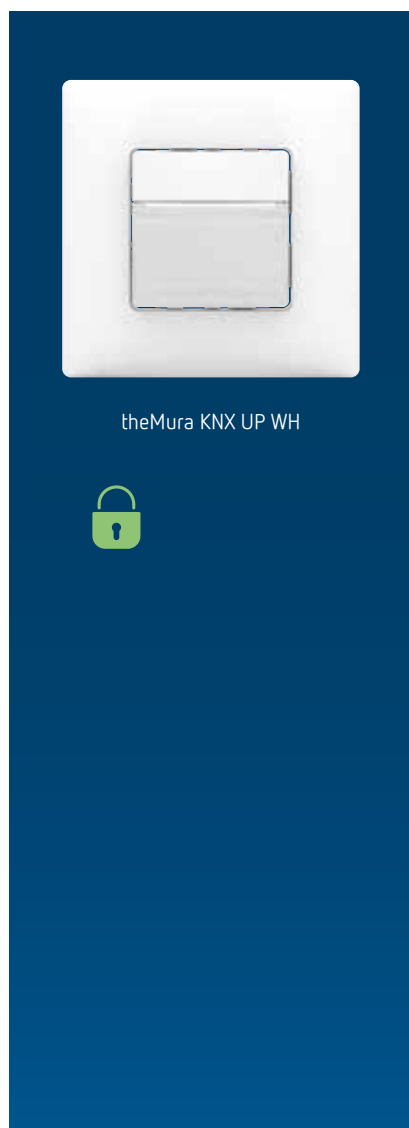with Theben frame
(2.2 m installation height)

NEW
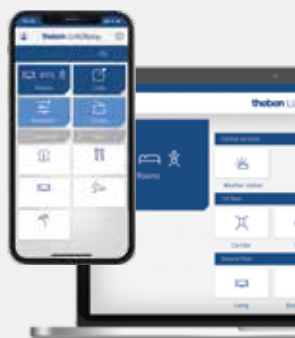
Smart home

3-wire motion/presence detector
Slave
theMura S180 Slave UP
with Theben frame
theMura S180 Slave B UP
without cover

2-wire motion detector
For staircase light timer switch
theMura S180-100 2W UP
with Theben frame
theMura S180-100 2W B UP
without cover

theMura KNX UP WH

Description

- Passive infrared presence / motion detector for flush-mounted wall mounting
- Rectangular detection area
- For the KNX bus system
- KNX Data Secure
- Choice of fully or semi-automatic operation
- Integrated, freely configurable push button (can be deactivated)
- Manual override possible via external KNX push button
- Targeted brightness measurement (mixed light measurement)
- Teach-in function
- Block functions
- HVAC channel without effect of brightness
- Configurable switch-on delay and HVAC channel time delay
- Extension of detection area via master / slave or master / master configuration
- Adjustable detection sensitivity
- Test mode for checking function and detection area
- Settings via ETS software (full range of functions)
- Area restrictions in scope of supply
- With Theben bezel frame
- Also fits in many common switch ranges (with accessories), see www.theben.de / theMura or on page 321

theMura S180 KNX UP WH
- Motion detector
- Rectangular detection area 170°, 14 x 17 m (238 m^2) at 1.1 m installation height
- 1 light channel and 1 HVAC channel

- Switching
- Lighting dimmable in switching mode with or without effect of daylight
- 3 logic channels (AND, OR, XOR)

theMura P180 KNX UP WH
- Presence detector
- Rectangular detection area 170°, 14 x 17 m (238 m^2) at 1.1 m installation height
- 2 light channels and 2 HVAC channels
- Switching or constant lighting control with standby function (orientation light)
- Lighting dimmable in switching mode with or without effect of daylight
- Easy to calibrate brightness measurement
- Short-term presence
- Selectable control speed
- Aura effect function
- Scene functionality
- Integrated orientation light (white)
- Integrated temperature sensor
- Acoustic function
- 2 binary inputs
- 6 logic channels (AND, OR, XOR)
- Limited setting options with theSenda B app / universal remote control
- Limited setting options with theSenda P service remote control
- Optional theSenda S / theSenda B user remote control for manual override

theMura P180 2.20 KNX UP WH
As theMura P180 KNX UP WH, but:
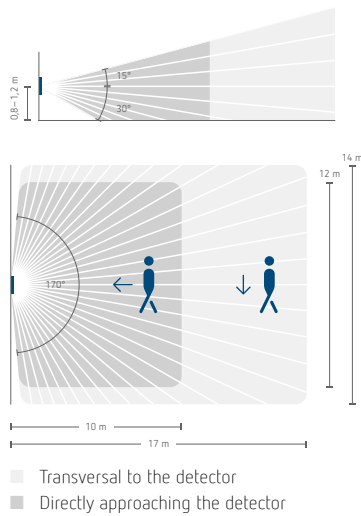- Rectangular detection area 170°, 16 x 10 m (160 m^2) at 2.2 m installation height

Product selection

Product type	Channel	Installation height	Colour		Type	Item no.
Motion detector	1 x light | 1 x HVAC	0.8-1.2 m	White	○	theMura S180 KNX UP WH	2069650
Presence detector	2 x light | 2 x HVAC	0.8-1.2 m	White	○	theMura P180 KNX UP WH	2069655
Presence detector	2 x light | 2 x HVAC	2.2 m	White	○	theMura P180 2.20 KNX UP WH	2069658

Technical data

	theMura S180 KNX UP WH	theMura P180 KNX UP WH	theMura P180 2.20 KNX UP WH
Operating voltage KNX	Bus voltage, < 10 mA	Bus voltage, < 12 mA	
Installation height	0.8 – 1.2 m		2.2 m
Brightness setting range	5 – 3000 lx		
Lighting time delay	30 s – 60 min		
HVAC time delay	10 s – 120 min		
HVAC switch-on delay	10 s – 30 min / not active		
Size of flush-mounted box	Size 1		
Temperature measurement range	–	−5 °C ... +45 °C	
Ambient temperature	−15 °C ... +45 °C		
Protection rating	IP 20		

Additional technical data available at: www.theben.de / produkt / Item no.

theben

Detection area (theMura S180 KNX / theMura P180 KNX)

Transversal to the detector
Directly approaching the detector

Scale drawings (theMura S180 KNX / theMura P180 KNX)
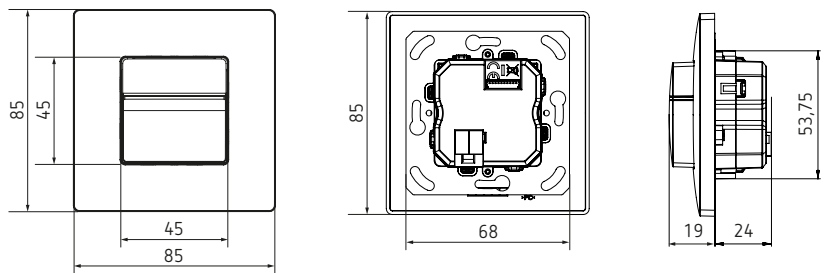
Detection area (theMura P180 2.20 KNX)
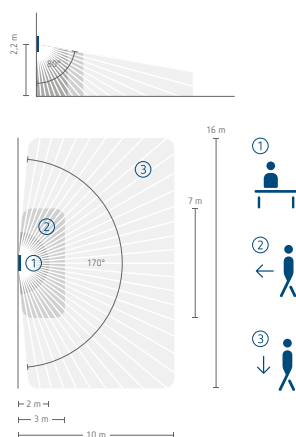
Scale drawings (theMura P180 2.20 KNX)
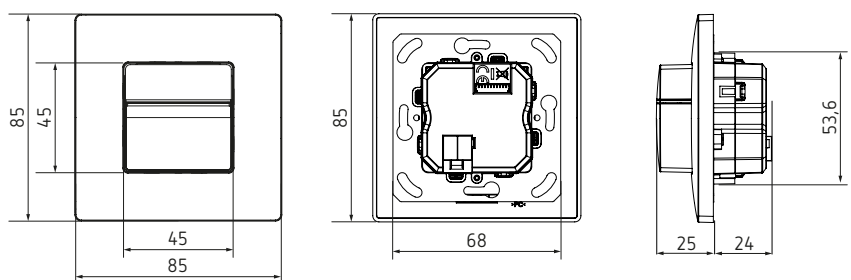
Accessories

theSenda B app / universal remote control
↳ Item no.: 9070985

theSenda P service remote control
↳ Item no.: 9070910

User remote control theSenda S
↳ Item no.: 9070911

Various adapter frames
Details, see page 17

theben

Additional technical data available at: www.theben.de / produkt / Item no.

13

AC IR1 KNX Split Unit Gateway
Efficient control of
Air-conditioning split devices via KNX

NEW

The Split Unit Gateway AC IR1 KNX is used to control climate split units. They are used in residential buildings, hotels, offices, industrial and functional buildings, among others. The transmitting unit of the device is glued to the receiving unit of the split unit. The unit can be installed in a flush-mounted or surface-mounted box - without additional auxiliary voltage.

→ Easy to set up split unit gateway with large database of
    split unit devices.
→ Currently over 500 different split unit devices / remote
    controls are available in the database and controllable
→ The database is regularly expanded

AC IR1 KNX

Description

- Split Unit Gateway KNX for controlling climate split devices via app
- Easy to set up IR gateway with large database of split unit devices
- Currently, over 500 different split unit devices / remote controls are available in the database and can be controlled
- The database is regularly expanded

Product selection

Type	Item no.
AC IR1 KNX	4940320 *

Technical data

	AC IR1 KNX
Operating voltage KNX	Bus voltage, max. 12 mA
Type of installation	In flush / surface-mounted box
Cable length of IR transmitter	2 m
Ambient temperature	−5 °C … +45 °C
Protection class	III
Protection rating	IP 20

* Available june 2023

Universal genius
theMura adapter frame
clever and attractive

Theben frame
Item no. 9070798

Theben theMura flush-mounted motion and presence detectors are suitable for universal use with the switch ranges of all leading manufacturers. The scope of supply depends on the respective switch range.
Additional information at **www.theben.de/themura**

Jung SERIE A, CREATION
Adapter frame 45A JUAS CL
Item no. 9080003

NEW:
Many adapter frames can now also be ordered in neutral colours, which allows an even wider universal use.
Not available for theMura 2.20!

theMura base unit
(theMura S180 ... B UP)

Accessory set consisting of push button cover, adapter frame or plastic mounting plate e.g. JUNG adapter frame + push button cover
(Item no. 9070789)

Everything at a glance
theMura adapter frame
of leading manufacturers

Feller EDIZIOdue
Hager (kallysto.line, kallysto.
pro, kallysto.trend)

legrand
(Niloé, Mosaic)

Busch-Jaeger Balance SI

Busch-Jaeger Reflex SI

Jung SERIE A
(A 500, A plus, A creation,
AS 500)

Merten System M (1-M,
Atelier-M, M-Smart, M-Pure,
M-Plan, M-Creativ)

**Gira System 55**
(Standard 55, E2, Event)

Berker S.1

Scope of supply of theMura covers, white / colour-neutral	Suitable for	Item no. (white)	Item no. (colour-neutral)
Adapter frame + push button cover + mounting adapter	**Feller** EDIZIOdue **Hager** kallysto.line, kallysto.pro, kallysto.trend	9070786	
Plastic mounting plate + button cover	**legrand** Niloé, Mosaic	9070787	
Adapter frame + push button cover	**Busch-Jaeger** balance SI	9070788	9080002
Adapter frame + push button cover	**Busch-Jaeger** Reflex SI	9070754	9080001
Adapter frame + push button cover	**Jung** SERIE A (A 500, A plus, A creation, AS 500)	9070789	9080003
Adapter frame + push button cover	**Merten** System M (1-M, Atelier-M, M-Smart, M-Pure, M-Plan, M-Creativ)	9070790	9080004
Adapter frame + push button cover	**Gira** System 55 (Standard 55, E2, Event)	9070791	9080005
Adapter frame + push button cover	**Berker** S.1	9070792	9080006
Adapter frame + push button cover	**Theben frame**	9070798	
Plastic mounting plate + push button cover	**Niko,** Original		9070804

Frames of switch manufacturers are not included in scope of delivery.
*Colour-neutral adapter frames not available for theMura 2.20!
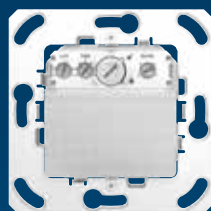
theMura S180 UP WH	theMura S180-101/100 B UP	theMura S180 Slave B UP	theMura S180-100 2W B UP

Description

Common functions
- Passive infrared presence/motion detector for flush-mounted wall mounting
- Rectangular detection area 170°, 14 x 17 m (238 m²) at 1.2 m installation height
- Mixed light measurement suitable for fluorescent lamps (FL/PL/ESL), halogen/incandescent lamps and LEDs
- Integrated button (can be deactivated)
- Available with and without bezel frame
- Also fits in many common switch ranges (with accessories), see www.theben.de/theMura or on page 321
- Ready for immediate use due to factory presetting
- Area restriction in scope of delivery

theMura S180-100 UP
(With or without Theben frame)
- Motion detector (PIR)
- 1 lighting channel (relay 230 V)
- Choice of fully or semi-automatic operation
- Configurable brightness switching value, teach-in function
- Configurable time delay
- Staircase light function, extended function
- Extension of detection area via master/slave switching, max. 6 detectors

theMura S180-101 UP
(With or without Theben frame)
- Presence detector (PIR)
- 1 lighting channel (relay 230 V) and 1 presence channel (potential-free relay for HVAC control)
- Choice of fully or semi-automatic operation
- Connection option for external push button
- Configurable brightness switching value, teach-in function
- Automatic calibration of brightness measurement
- Switch-on delay and time delay also separately configurable for presence channel
- Reduction of time delay when present briefly (short-term presence)
- Staircase light function, extended function
- Adjustable sensitivity
- Integrated orientation light
- Acoustic function
- Detection area extendable by master/slave switching with additional theMura detectors, max. 6 detectors
- Changing values and settings is possible with potentiometers and with one of these optional remote controls:
  - theSenda B app/universal remote control
  - theSenda P service remote control
- Optional theSenda S/theSenda B user remote control for manual override

theMura S180 Slave UP
(With or without Theben frame)
- Slave version for:
  - theMura S180-100 UP WH
  - theMura S180-100 B UP
  - theMura S180-101 UP WH
  - theMura S180-101 B UP

theMura S180-100 2W UP
(With or without Theben frame)
- Motion detector (PIR
- 1 channel light, only for controlling a staircase light timer switch from Theben (ELPA, 4-way wire switching), no load switchable
- Ideal for replacing existing push buttons (no N wire required)
- Configurable brightness switching value, teach-in function
- Time delay is set at the staircase light timer switch
- Parallel switching of up to 12 detectors to one ELPA possible

theMura S180-101 2.20 UP WH
As theMura S180-101 UP WH, but:
- Rectangular detection area 170°, 16 x 10 m (160 m²) at 2.2 m installation height

Product selection

| With Theben frame	Channel	Installation height	Colour		Product type	Type	Item no.
√	Light	0.8–1.2 m	White	○	Motion detector	theMura S180-100 UP WH	2060650
	Light | Presence	0.8–1.2 m	White	○	Presence detector	theMura S180-101 UP WH	2060655
	Light | Presence	2.2 m	White	○	Presence detector	theMura S180-101 2.20 UP WH	2060658
	Slave	0.8–1.2 m	White	○	Motion/presence detectors	theMura S180 Slave UP WH	2060660
	Light (control to ELPA)	0.8–1.2 m	White	○	Motion detector	theMura S180-100 2W UP WH	2060670
–	Light	0.8–1.2 m	–		Motion detector	theMura S180-100 B UP	2060750
	Light | Presence	0.8–1.2 m	–		Presence detector	theMura S180-101 B UP	2060755
	Slave	0.8–1.2 m	–		Motion/presence detectors	theMura S180 Slave B UP	2060760
	Light (control to ELPA)	0.8–1.2 m	–		Motion detector	theMura S180-100 2W B UP	2060770

Technical data

	theMura S180-100	theMura S180-101	theMura S180-101 2.20	theMura S180 Slave	theMura S180-100 2W
Operating voltage	230 V AC				
Frequency	50 – 60 Hz				
Installation height	0.8 – 1.2 m	0.8 – 1.2 m	2.2 m	0.8 – 1.2 m	0.8 – 1.2 m
Power consumption	0.4 W				
Brightness setting range	5 – 1000 lx	5 – 3000 lx		–	5 – 1000 lx
Lighting time delay	10 s – 30 min / pulse	10 s – 60 min / pulse		–	Pulse
Incandescent / halogen lamp load	2300 W			–	
LED lamp (typ.)	< 2 W = 40 W | > 2 W = 450 W			–	
Inrush current level	max. 600 A / 200 µs			–	
Presence switch-on delay	–	0 s – 10 min		–	
Presence time delay	–	10 s – 120 min		–	
Presence switching capacity	–	50 W / 50 VA, max. 2 A		–	
Size of flush-mounted box	Size 1				
Ambient temperature	– 15 °C … +45 °C				
Protection rating	IP 20				

Detection areas (rectangular)
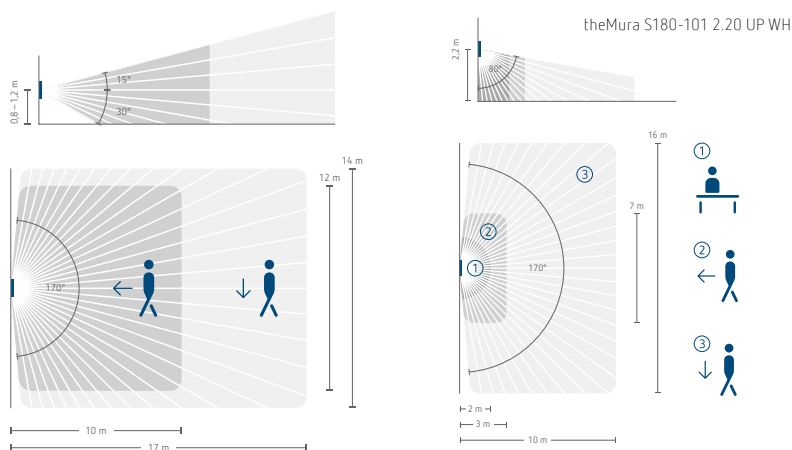
theMura S180-101 2.20 UP WH

Accessories

theSenda B app / universal remote control
↳ Item no.: 9070985

theSenda P service remote control
↳ Item no.: 9070910

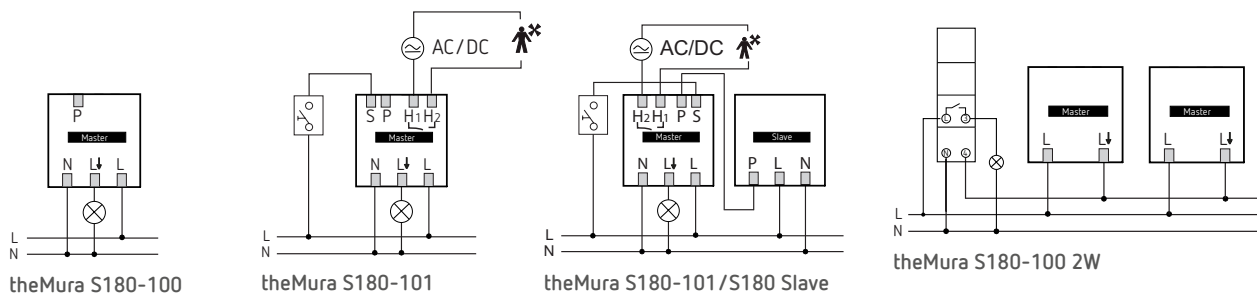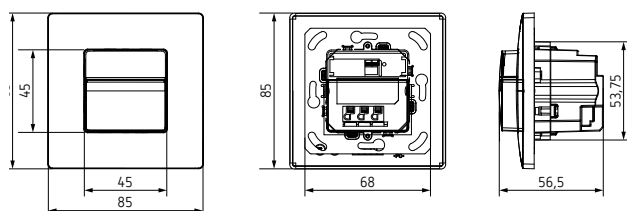**theSenda S user remote control**
↳ Item no.: 9070911

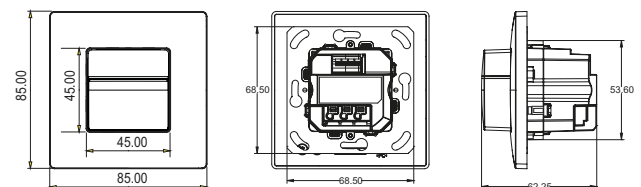**Adapter frame 45A**
↳ Details, see page 17

Connection examples

theMura S180-100

theMura S180-101

theMura S180-101 / S180 Slave

theMura S180-100 2W

Scale drawings

Scale drawings (theMura S180-101 2.20 UP WH)

Digital clock thermostats
RAMSES top3 series
Conveniently controlled from your smartphone

{ NEW }

The digital clock thermostats of the RAMSES top3 series monitor and control the room temperature according to time. Whether a house or flat, whether office, workshop or shop, the clock thermostat ensures the desired comfort temperature and supports you in reducing your energy consumption as well as protecting the environment.

- 3 individually programmable weekly programmes, as well as comfort, eco, party and setback function
- Holiday programme
- Wall comparison to adjust the room temperature measurement
- Adjustable optimiser to achieve the desired set temperature at the time of switching
- External input for alternative floor or room temperature sensor, for a window contact and presence detector
- Chimney sweeping function
- Info display (pump, heating, temperatures, etc.) and error notifications

Available on the App Store

GET IT ON Google play

Convenient operation

The RAMSES clock thermostats can be operated intuitively on the device: Set the temperature, various programmes or even time-controlled temperatures and setback phases can be set here. Alternatively, the operation can also be carried out via the free app.

Maximum security against tampering

RAMSES top3 operates with a local Bluetooth connection in your home. There is no need for an Internet connection or any additional gateways or routers. A clear advantage in terms of security against tampering.

Easy to install

< min

Unlike other smart thermostats, RAMSES top3 does not require any additional components such as gateways, switch actuators, etc. Install the RAMSES top3 in the classic way like conventional clock thermostats: quickly, easily and simply.

Designed by ID AID.

OpenTherm version
- PI room controller, controlled by atmospheric conditions, with or without room influence
- Three heating and one domestic hot water weekly time program, preset and changeable

OUT

230 V

Mains version
- 230 V AC power supply
- Output relay (floating, available as 10 A or as 16 A mains version)
- Intelligent control algorithm (TPI)

OUT

230 V

2-wire ON/OFF version
- 230 V AC power supply
- Relay output (floating, 16 A)
- Option: 0–10 V modulation output
- Replaces 2-wire controller in the room when the lower housing is fitted next to the heating unit
- Suitable for switching high currents (relay in bottom of housing) for electric heating

Climate control
Clock thermostats, Digital 230 V, battery version
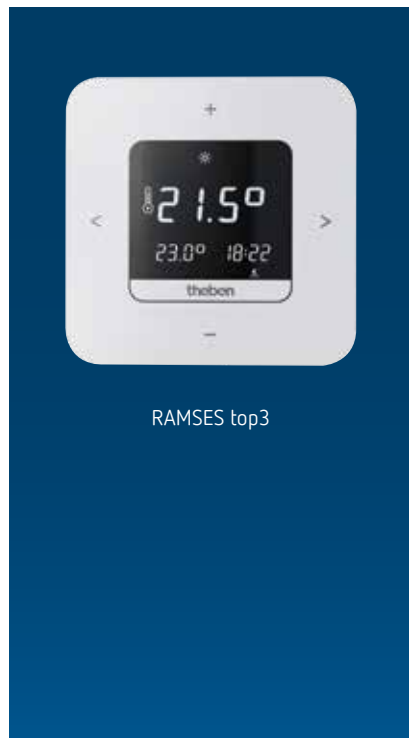
RAMSES top3

Description

Common functions
- Digital clock thermostat in flat design for time-dependent monitoring and control of room temperature
- Operation on device or via app
- Direct Bluetooth Low Energy (BLE) connection between app and clock thermostat, no communication via the Internet
- Settings configured conveniently via the app with intuitive operation from a smartphone or tablet
- Increased user convenience
- 3 individually programmable weekly programs, as well as comfort, eco and setback function
- Suitable for energy-saving room temperature regulation in houses, apartments, etc.
- Illuminated display through keystroke
- External input for the flexible connection of an external room temperature sensor, floor sensor, motion detector or telephone contact
- Intelligent control algorithm (pulse-duration controller, hysteresis controller)

- Suitable for on/off heating systems, zone-based or single-room control, electric heating units

RAMSES 811 top3
- Battery version (also for retrofitting with 2-wire connection)
- Installation in flush-mounted socket

RAMSES 812 top3
- Mains version
- Installation on flush-mounted box or wall installation possible

RAMSES 812 top3 16A
- Mains version
- Installation in flush-mounted socket
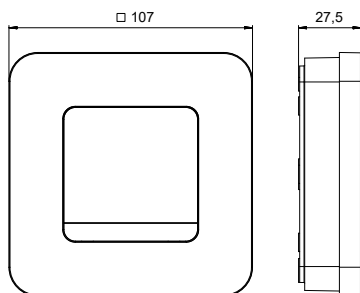- Increased switching capacity (16 A)

Product selection

Program	Operating voltage	Switching capacity at 250 V AC	Type	Item no.
Weekly program	Battery	10 A	RAMSES 811 top3	8119200 *
	230 V AC	10 A	RAMSES 812 top3	8120200 *
	230 V AC	16 A	RAMSES 812 top3 16 A	8120210 *

Technical data

	RAMSES 811 top3	RAMSES 812 top3	RAMSES 812 top3 16A
Operating voltage	2 AA batteries	230-240 V AC	
Frequency	-	50 Hz	
Type of contact	NO contact		
Switching capacity	10 A (at 250 V AC, cos φ = 1)		16 A (at 250 V AC, cos φ = 1)
Temperature setting range	+2 °C ... +30 °C		
Program	Weekly program, daily program, holiday program, 3 basic programs		
Number of memory locations	42		
Control types	Pulse width modulation or hysteresis controller		
Control period	Pulse duration controller: 5 - 30 min | Hysteresis controller: -		
Control capture range	Pulse duration controller: 0.2 - 5 K | Hysteresis controller 0.2: - 1.0 K		
Switch output	Floating, not for SELV		
Time accuracy at 25 °C	≤ ± 1 s/day (Quartz)		
Power reserve	10 minutes	4 hours	
Standby output	< 0.2 W		
Protection rating	IP 40		
Protection class	II as per EN 60 730-1		
Ambient temperature	0 °C ... +50 °C		

* Available may 2023

Additional technical data available at: www.theben.de/produkt/ Item no.

theben

Scale drawings

□ 107   27,5

Accessories

ALPHA 5 230 V actuator
↳ Item no.: 9070441

ALPHA 5 24 V actuator
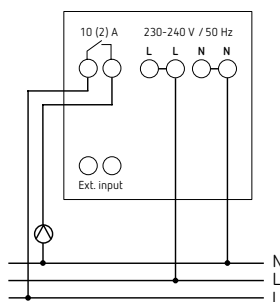↳ Item no.: 9070442

Floor sensor
↳ Item no.: 9070321

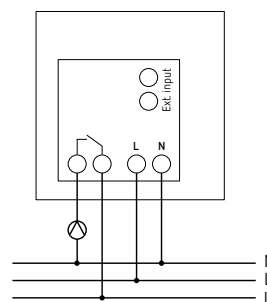**RAMSES IP65 temp. sensor**
↳ Item no.: 9070459

Connection example

10 (2) A

Ext. input

RAMSES 811 top3

10 (2) A   230-240 V / 50 Hz
L   L   N   N

Ext. input

RAMSES 812 top3

Ext. input

L   N

RAMSES 812 top3 16A

Simple operation via app

- Intuitive programming without the need for prior experience and device monitoring on your high-resolution smartphone display
- Maximum protection against tampering and optimum data protection thanks to the local Bluetooth Low Energy connection. No Internet connection required.

Climate control
Clock thermostats, OpenTherm

Description

- Digital clock thermostat in flat design for time-dependent monitoring and control of room temperature
- Operation on device or via app
- Power supply via OpenTherm bus
- Direct Bluetooth Low Energy (BLE) connection between app and clock thermostat, no communication via the Internet
- Settings configured conveniently via the app with intuitive operation from a smartphone or tablet
- Installation on flush-mounted box or wall installation possible
- Increased user convenience
- Communication with the heating unit via OpenTherm bus
- 3 individually programmable weekly programs, as well as comfort, eco and setback function

- Suitable for energy-saving room temperature regulation in houses, apartments, etc.
- Illuminated display through keystroke
- External input for the flexible connection of the external room temperature sensor, floor sensor, motion detector or telephone contact
- PI room controller, controlled by atmospheric conditions, with or without room influence
- Preset with three modifiable weekly programs for heating and one for tap water
- Suitable for modulating gas condensing boiler systems and modulating heating systems with OpenTherm interface
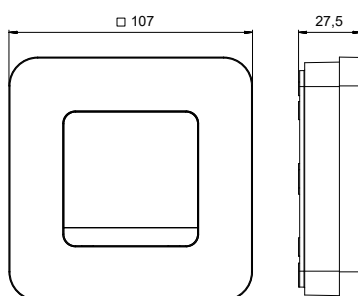
RAMSES 850 top3 OT

Product selection

Program	Operating voltage	Type	Item no.
Weekly program	OT bus	RAMSES 850 top3 OT	8509200 *

Technical data

	RAMSES 850 top3 OT
Operating voltage	OT bus
Temperature setting range	+2 °C ... +30 °C
Program	Weekly program, daily program, holiday program, 3 basic programs
Number of memory locations	42
Control types	Modulating controller, works with OpenTherm protocol (OpenTherm V4.0 with SmartPower)
Type of connection	2-wire (BUS) room controller
Time accuracy at 25 °C	≤ ± 1 s/day (Quartz)
Power reserve	4 hours
Standby output	< 0.2 W
Protection rating	IP 40
Protection class	III as per EN 60 730-1
Ambient temperature	0 °C ... +50 °C

Scale drawings

□ 107   27,5

* Available may 2023

Additional technical data available at: www.theben.de/produkt/ Item no.

theben

Accessories

RAMSES IP65 temp. sensor
↳ Item no.: 9070459

Floor sensor
↳ Item no.: 9070321

Connection example

OpenTherm

Ext. input

OpenTherm-Bus
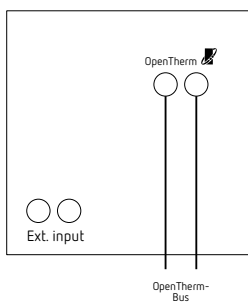
RAMSES 850 top3 OT

Simple operation via app

- Intuitive programming without the need for prior experience and device monitoring on your high-resolution smartphone display
- Maximum protection against tampering and optimum data protection thanks to the local Bluetooth Low Energy connection. No Internet connection required

Additional technical data available at: www.theben.de/produkt/ Item no.

25

Climate control
Clock thermostats, Digital battery version

RAMSES 813 top3 HF Set A

RAMSES 813 top3 HF Set 1

Description

Common functions

- Radio-controlled system for room temperature control
- The system consists of a digital clock thermostat and a receiver
- Battery version (also for retrofitting with 2-wire connection)
- Installation of clock thermostat on flush-mounted box, wall installation, or with stand possible
- Operation on device or via app
- Direct Bluetooth Low Energy (BLE) connection between app and clock thermostat, no communication via the Internet
- Settings configured conveniently via the app with intuitive operation from a smartphone or tablet

- Increased user convenience
- 3 individually programmable weekly programs, as well as comfort, eco and setback function
- Suitable for energy-saving room temperature regulation in houses, apartments, etc.
- Illuminated display through keystroke
- External input for the flexible connection of the external room temperature sensor, floor sensor, motion detector or telephone contact
- Intelligent control algorithm (pulse-duration controller, hysteresis controller)
- Suitable for on/off heating systems, zone-based or single-room control, electric heating units

RAMSES 813 top3 HF Set A

- Consisting of a RAMSES 813 top3 HF and a REC 11 receiver with an NO contact 16(2) A/250 V AC for wall installation

RAMSES 813 top3 HF Set 1

- Consisting of a RAMSES 813 top3 HF and a REC 1 receiver (series mounting device 5 TE) with changeover contact 6(2) A/250 V AC

Product selection

Type of connection	Program	Switching capacity at 250 V AC	Receiver	Type	Item no.
Wireless	Weekly program	16 (2) A	REC 11- wall installation	RAMSES 813 top3 HF Set A	8139203 *
	Weekly program	6 (1) A	REC 1- DIN-rail	RAMSES 813 top3 HF Set 1	8139201 *

Technical data

	RAMSES 813 top3 HF Set A	RAMSES 813 top3 HF Set 1
Operating voltage	2 AA batteries	
Type of contact	NO contact	Changeover contact
Switching capacity	16 A (at 250 V AC, cos φ = 1)	6 A (at 250 V AC, cos φ = 1)
Temperature setting range	+2 °C ... +30 °C	
Program	Weekly program, daily program, holiday program, 3 basic programs	
Number of memory locations	42	

* Available july 2023

	RAMSES 813 top3 HF Set A	RAMSES 813 top3 HF Set 1
Control types	Pulse width modulation or hysteresis controller	
Control period	Pulse duration controller: 5 - 30 min | Hysteresis controller: –	
Control capture range	Pulse duration controller: 0.2 - 5 K | Hysteresis controller 0.2: – 1.0 K	
Switch output	Floating, not for SELV	Floating
Time accuracy at 25 °C	≤ ± 1 s/day (Quartz)	
Power reserve	10 minutes	
Standby output	< 1 W	
Protection rating	IP 40	
Protection class	II as per EN 60 730-1	
Ambient temperature	0 °C ... +50 °C	

Accessories

ALPHA 5 230 V actuator
↳ Item no.: 9070441

ALPHA 5 24 V actuator
↳ Item no.: 9070442

Floor sensor
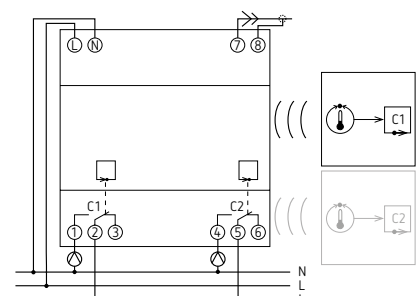↳ Item no.: 9070321

RAMSES IP65 temp. sensor
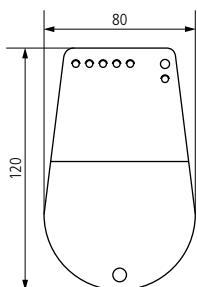↳ Item no.: 9070459

Connection example
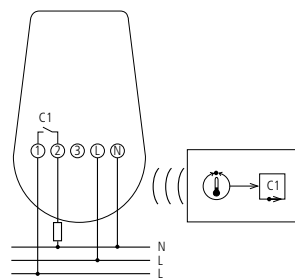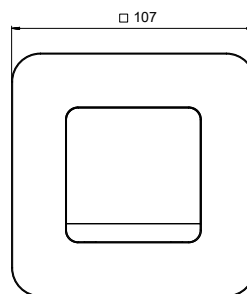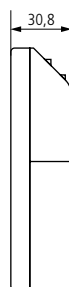

RAMSES 813 top3 HF Set A

RAMSES 813 top3 HF Set 1

Scale drawings

RAMSES 813 top3 HF Set A

Simple operation via app

- Intuitive programming without the need for prior experience and device monitoring on your high-resolution smartphone display
- Maximum protection against tampering and optimum data protection thanks to the local Bluetooth Low Energy connection. No Internet connection required

Additional technical data available at: www.theben.de/produkt/ Item no.

27

theben

4 003468 990292