theben
energy saving comfort

Energy-efficient, comfortable, versatile
Catalogue 2016



Efficient distribution

Theben stands for a clear commitment to the three-stage distribution approach via wholesale and retail outlets. Our capacious central warehouse guarantees our goods are ready for delivery at all times.

Reliable customer service

You can rely on us – even after the guarantee period expires: when needed, our customer service provides you with rapid and inexpensive repair. And you will immediately receive the spare parts requested - even for older devices.

Effective training

You can never have enough knowledge: especially about our products. We offer our customers a broad range of training options - at our own premises in Haigerloch or also in your vicinity at our sales partners. The entire Theben training program can be found at: www.theben.de/schulung

Most important trade fairs

You can find us at important trade fairs. There you can find out everything about our new products. Drop by: we look forward to your visit:
E-world, Essen, 16/02–18/02/2016
light+building, Frankfurt, 13/03–18/03/2016
belektro, Berlin, 11/10–13/10/2016
GET Nord, Hamburg, 17/11–19/11/2016

Personal contact

Some questions can't wait. Our experts will help you in a quick and straightforward way. Monday to Thursday from 7.00 am to 6.00 pm, Friday to 4.00 pm on the telephone. Or immediately by email.
↳ Telephone hotline: +49 7474 692-369
↳ Email hotline: hotline@theben.de

Information-packed website

All important information about our products can be found on our website. With just a few clicks the "Product finder" function takes you to the right product for your application.

Mobile website

In order to find out about our products in the best possible way using your smartphone, we offer you a mobile version of the Theben website: m.theben.de/en

Digital newsletter

It couldn't be more convenient: our email newsletter informs you about interesting facts and news from us. Just register at www.theben.de/en/email-newsletter

Social media

Whether praise, questions or suggestions: we look forward to your posts and provide you with up-to-date information via the following channels:

- xing.com/companies/thebenag
- plus.google.com/+TheThebenAG/
- youtube.com/user/TheThebenAG

	New products	
Time and light control	Digital time switches	
	Analogue time switches	
	Time relays/hour counters	1234h
	Staircase time switches/dimmers	
	Twilight switches	
Presence and motion detectors	Presence detectors	
	Motion detectors/spotlights	
Climate control	Clock thermostats	
	Room thermostats	
	Sensor technology	
Home and building control	KNX	
	Living comfort control	
	Logic controller	
Accessories / Appendix	Index/List of discontinued models, Brochures, General Conditions, Agencies	



We stand for quality: Dr. Andreas Stratmann and Thomas Sell
With a few exceptions, our entire product range is produced in Germany, at our headquarters in Haigerloch. During the manufacturing process, the 100 % final inspection ensures that each of our products leaves our company in a flawless condition.

Dear customers and partners,

We pay utmost attention to the detail, and always have done. In the past, this was reflected in sophisticated and precise time switches. Today our continued attention to detail is reflected in software based solutions, such as the new KNX visualisation theServa, of which programming and operation are praised as particularly intuitive. This will most certainly also apply to the app of our new UP dimmer, which we will introduce to you in our separate New products brochure.

Our goal is to support you in your professional challenges as best as possible. Either with comprehensive product information, which allow you to select products easily – even if you are traveling, via our mobile website. Or by convenient installation, or intuitive operation – as for instance with our theSenda remote controls for various motion and presence detectors.

We use resources consciously. Not only you as our customer benefit from our operating instructions, which are optimised for smartphones, but also the environment: we were able to reduce the paper consumption by more than half. Many of our products have the lowest standby consumption on the market, and in this way actively contribute to reducing CO_2 emissions.

We are pleased to introduce a variety of new products in this catalogue: as for instance the PlanoSpot KNX presence detector (page 230), the first presence detector on the market with a mechanically moving detection area. Those who like compact functionality will find perfect KNX actuators in the new FIX2 series (from page 194).

We hope you will enjoy our new catalogue 2016, and we look forward to continuing our successful cooperation in the years to come.

Your Theben board, together with the whole team

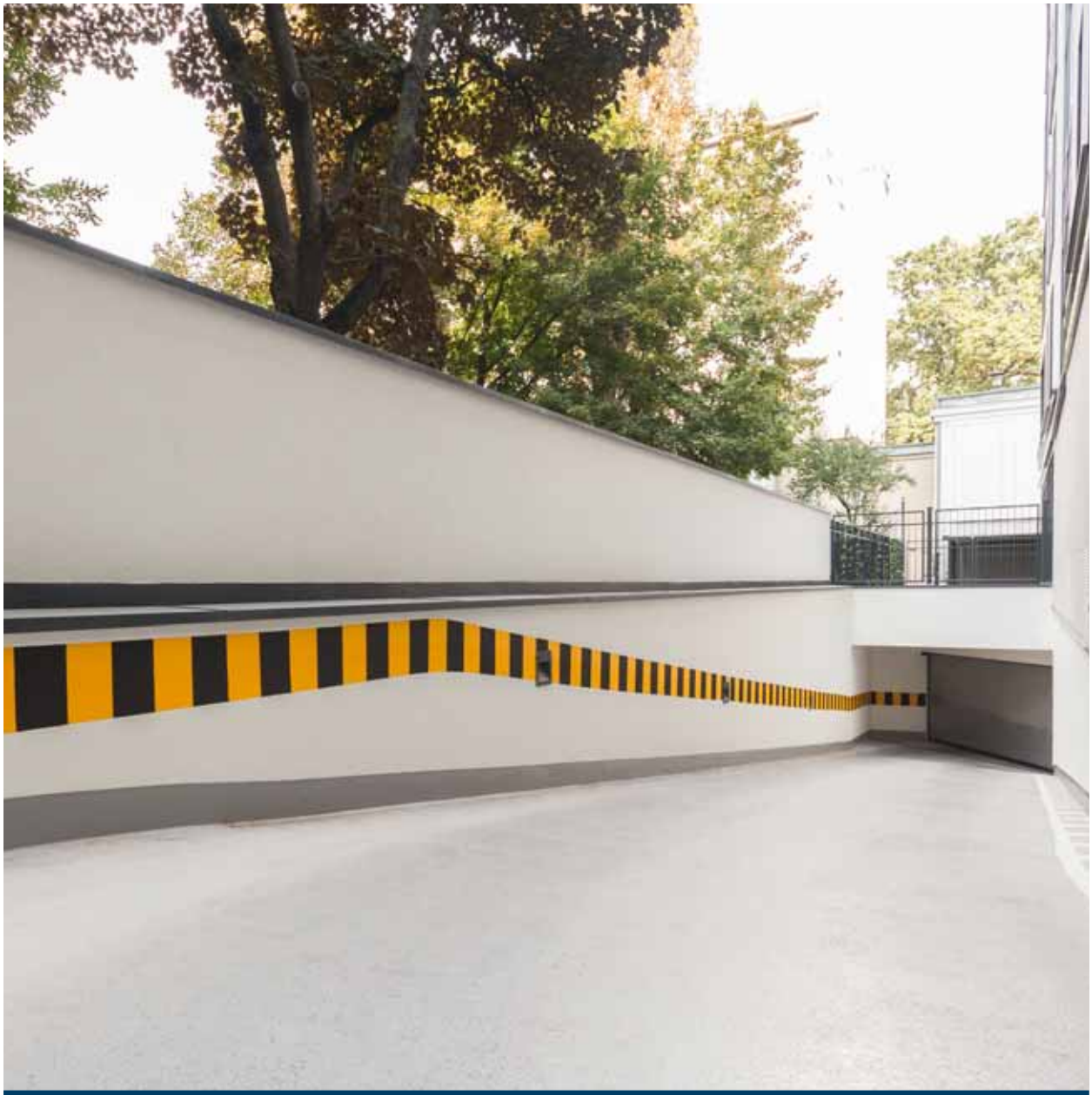


Thomas Sell
Management board



Dr. Andreas Stratmann
Management board

1



theLeda E
Brighter, illuminating, energy saving
The new LED spotlights with motion detector



Product information on page 138

LED spotlights with theLeda E motion detector

Nothing can be brighter. With the powerful **theLeda E LED spotlights**, entrances, driveways and parking spaces become safely, reliably and quickly illuminated.

Quickly, not only because installation is simple, thanks to the large terminal area and test function, but also because the spotlights reach **100 % of their brightness immediately after being switched on, which is up to 2310 lm with the theLeda E30**. At the same time, theLeda itself has a very low energy consumption, it works extremely energy-efficient and is rated energy efficiency class A+ (theLeda E30 BK is rated energy **efficiency class A**). Good for the environment and good for your wallet. The versions with motion detector reliably detect movements in their detection area **of up to 12 metres.** Thanks to the very flexible sensor heads, the detection area can be aligned very well. Additional devices, such as theLeda E spotlights without detectors, can be connected via the additional relay output of **theLeda E30 with motion detector.** The area to be detected can be increased in a cost saving way, by switching two devices as master/master (theLeda E30).

theLeda E is available in three different power ratings for spotlights: **10 W, 20 W, and 30 W, as well as in two versions: with and without motion detector.** All LED spotlights are available in white, and black. Since all versions are protection class IP 55, theLeda E can be installed anywhere outdoors.

Easier to use and install

- Simple setting
- Spacious socket (< min)
- Practical test function
- Easily accessible settings

Safer and more convenient to use

- Swivelling sensor head
- Simple and rainproof (IP 55)
- Manual switching

theLeda E30

- Extendable via switching output



All spotlight versions are also available without motion detector.

A luminous family: theLeda E LED spotlights are available in the colours black, and white.

1



swiss perfection swiss perfection swiss perfection swiss perfection

PlanoSpot KNX
Flexible, flat, feature-rich
A new dimension of presence dependent lighting control



Product information on page 230

Room situations in offices are changing faster today than ever before. The new Plano Spot KNX by ThebenHTS is the first presence detector on the market with a **mechanically moving detection area.**

Should the KNX presence detector detect too much, you can conveniently **reduce its detection** area by remote control or via ETS **parameters.** This makes the PlanoSpot KNX the optimal presence detector for spaces in which a flexible floor **plan is important.**

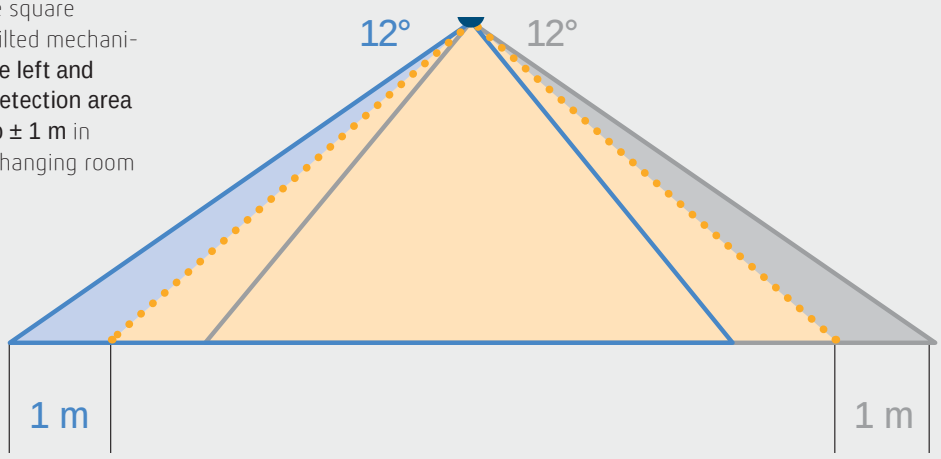
However, PlanoSpot can do even more: thanks to its **three directed light measurements**, it ensures pleasant **constant lighting conditions.** In any weather and in any season. And even if no people are detected. A function ensuring comfortable lighting conditions, especially in museums, restaurants, hotels, or entrance halls.

Rich in functionality and versatile: highlights at a glance

- Three directed light measurements
- High tech mirror optics
- Presence-independent lighting control
- Square detection area
- Adjustable detection area
- Reducible detection areas
- Constant lighting control
- Clever teach-in-function
- Orientation light
- Easy to use remote control
- Self-learning time delay
- Short-term presence
- Calibration of brightness measurement
- Easy installation
- 76 mm outside diameter
- Sustainably energy efficient

Adjustable detection area

The mirror optics of the square detection area can be tilted mechanically by **up to 12° to the left and right.** In this way, the **detection area can be shifted by up to ± 1 m** in order to better detect changing room layouts.



1



swiss perfection swiss perfection swiss perfection swiss perfection

thePrema E
More discreet, more efficient, more stylish



The energy efficient presence detector in the award-winning design

Product information on page 102

Its shape is similar to a forming drop of water: clear, round, and perfectly shaped. It looks light and almost as if it was floating. Moreover, it is so flat that it is hardly noticeable when fitted on the ceiling. No housing anymore. Instead, pure functionality. Yet, those who notice it are thrilled. By its attractive **design and its** highly convincing functions.

Actually, it is hard to find another presence detector **that boasts such a** range of features. Everyone who learns of its advantages in open-plan offices, corridors, classrooms and conference rooms, warehouses or sports halls can benefit from it. thePrema regulates light**, heating and air conditioning** - regardless of whether or not there is someone in the room. In this way, everyone feels **comfortable and only the energy that is really needed is used.** The presence detector is available in the performance variants thePrema Standard and thePrema Performance.

thePrema stands out thanks to its top quality and reliability. No matter what will happen: our presence detector is always on the spot. If not, we will be there for you. **Guaranteed for five years.**

*In accordance with the guarantee conditions, see www.theben.de/en/guarantee

5 year guarantee*

Easier to use and install

- Intelligent parallel switching
- Square detection-area
- High installation height
- Configurable sensitivity
- Push button/ switch recognition
- Full and semi-automatic
- High switching capacity
- Individual lighting scenarios
- Easy to use remote control
- Reliable teach-in function

Energy-efficient use

- Minimum power consumption
- Innovative light measurement
- Permanent light measurement
- Self-learning time delay
- Illuminating short stays
- Most simple energy saving setting
- Safe staircase light function
- KNX version can be integrated
- Sensitive room surveillance

With the SendoPro remote control, the **operating modes of the light and presence relay can be assigned in a flexible way**. For example, the presence relay can be used as an additional lighting channel.



1







KNX FIX1 and FIX2 actuators: all optimally prepared

The KNX actuators for project business

Product information on page 192

Those who like a defined functionality in a compact way will find the **FIX1 and FIX2 compact actuators** to be the perfect alternative for the MIX2 actuators. Moreover, an affordable one.

For example, the **switching/blinds actuator RM 16 T KNX** with 16 relays can control mixed lights and blinds and is perfectly **suited for the use in property construction**, as in office buildings, public buildings, educational facilities or hotels. Wherever lighting and sun protection control are required in one room.



Dimming actuators

No flickering, an attractive, evenly rising brightness level with all currently available LED lamps - Theben's universal dimming actuators have already proven themselves on the market. Without exception, they have been enthusiastically received. They are considered to be one of the best dimming actuators of all.

Dimming actuators
FIX1 DM 2 T KNX
FIX2 DM 4 T KNX



Switch actuators

On/off with and without delay or staircase light with forewarning – the C-load switch actuators, for instance, offer you new freedom of action on up to 8 channels. They feature current recognition and are designed for higher lamp loads.

Switch actuators
FIX1 RM 4 U KNX
FIX1 RM 4 I KNX
FIX2 RM 8 I KNX
FIX1 RM 8 S KNX
FIX2 RM 16 S KNX



Switch/ blinds actuators

With the switch/blinds actuators you can switch and control as you like: 8 blinds or 16 switching channels - or mixed. This gives you more freedom in the use of the channels. Also, because you can assign them as you please afterwards.

Switch/ blinds actuators

FIX1 RM 8 T KNX
FIX2 RM 16 T KNX



Blind actuators

Blind actuators from Theben optimally incline the lamina's and allow glare-free working. They control the drives of roller blinds, sun and vision protection devices, skylights and ventilation flaps. Passive houses with interior blinds benefit from the 24 V versions.

Blind actuators
FIX1 JM 4 T KNX
FIX2 JM 8 T KNX
FIX1 JM 4 T 24V KNX
FIX2 JM 8 T 24V KNX



Heating actuators

With the heating actuators, Theben offers you the possibility of capturing the temperature in the individual rooms with affordable temperature sensors. Temperature control takes place in the actuator itself, the set point specification can be set centrally via the KNX visualisation theServa.

Heating actuators
FIX1 HM 6 T KNX
FIX2 HM 12 T KNX



Binary inputs

The Theben binary inputs cover the full range of contacts and voltages – whether floating contacts, 24 V, or 230 V. Each of the binary inputs offers six of them. That means more flexibility and greater investment security. Also, because in case of maintenance or service, each channel can be tested via manual operation.

Binary inputs
FIX1 BM 6 T KNX
FIX2 BM 12 T KNX



A smart combination
New accessories for heating, climate, and lighting control

Actuator
ALPHA 5

With the ALPHA 5, Theben introduces an extremely energy-efficient actuator for heaters, heating circuit distributors, and individual heating circuits. The ALPHA 5 does not only impress with its energy-efficient actuator consuming only 1 Watt, but also with its patented sealing system: all energised components are water-protected (protection class IP54) and ensure a hundred percent water protection. The surge protection protects against the common voltage peaks in the power grid. As the only manufacturer, Theben offers a 10 year warranty on the adjustment travel.

The large all round function display of the ALPHA 5 allows a highly visible function control from all perspectives. Even if mounted „over head“.

Product information on page 287



Mast mounting
S

The new mast mounting can be used to attach the classic Meteodata 140 S weather stations and the Meteodata 139 weather forecast receiver. The new mount is suited for corner installation as well as the installation at a mast: where you can even install two devices.

Product information on page 288

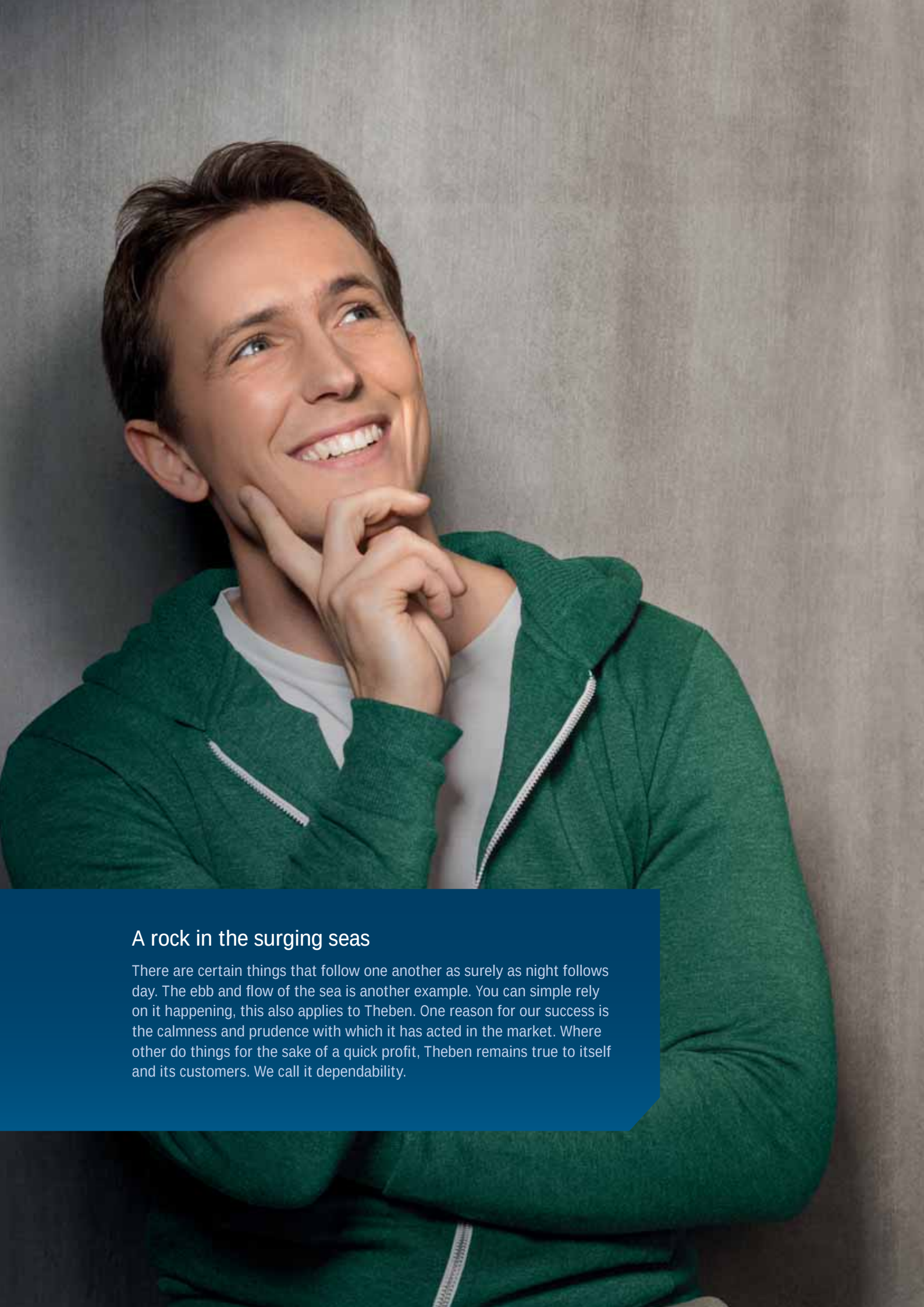


Surface frame
PlanoSpot KNX

Sometimes, the flat PlanoSpot KNX presence detector cannot be mounted flush with the ceiling. In cases, where a surface installation is mandatory, Theben offers the appropriate surface frame for the PlanoSpot KNX in the colours white, black, and silver.

Product information on page 281





A rock in the surging seas

There are certain things that follow one another as surely as night follows day. The ebb and flow of the sea is another example. You can simple rely on it happening, this also applies to Theben. One reason for our success is the calmness and prudence with which it has acted in the market. Where other do things for the sake of a quick profit, Theben remains true to itself and its customers. We call it dependability.

	Program	Number of channels	Memory locations	External inputs	PC interface	Memory card supplied	Type of connection	Type	Page
DIN rail, 2 modules									
	Weekly program	1	56	–	√	–	DuoFix spring terminals	TR 610 top2	18
		2	56	–	√	–	DuoFix spring terminals	TR 612 top2	18
		1	84	1	√	√	DuoFix spring terminals	TR 611 top2	20
								TR 611 top2 RC	20
		2	84	2	√	√	DuoFix spring terminals	TR 622 top2	20
	Astronomical program, weekly program	1	56	–	√	–	DuoFix spring terminals	SELEKTA 170 top2	22
			84	1	√	–	DuoFix spring terminals	SELEKTA 171 top2 RC	22
		2	84	2	√	–	DuoFix spring terminals	SELEKTA 172 top2	22
DIN rail, 3 modules									
	Yearly program, astronomical program	1	800	1	√	–	DuoFix spring terminals	TR 641 top2	24
						√	DuoFix spring terminals	TR 641 top2 RC	24
		2	800	2	√	–	DuoFix spring terminals	TR 642 top2	24
						√	DuoFix spring terminals	TR 642 top2 RC	24
	Extension module	–	–	–	–	–	DuoFix spring terminals	EM LAN top2	26
DIN rail, 4 modules									
	Yearly program, astronomical program	4	800	4	√	–	DuoFix spring terminals	TR 644 top2	24
						√	DuoFix spring terminals	TR 644 top2 RC	24
	Extension module	4	–	4	–	–	DuoFix spring terminals	EM 4 top2	26
DIN rail, 1 module									
	Weekly program	1	56	–	√	–	DuoFix spring terminals	TR 608 top2 S	28
			84	1	√	–	DuoFix spring terminals	TR 609 top2 S	28
	Astronomical program, weekly program	1	56	1	√	–	DuoFix spring terminals	SELEKTA 175 top2	28
Front panel installation / wall installation									
	Weekly program	1	84	–	√	–	Screw terminals	TR 635 top2	30
		2	84	–	√	–	Screw terminals	TR 636 top2	30
Flush mounting									
	Weekly program	1	56	–	√	–	Tab terminals	TR 684-1 top2	32
		2	56	–	√	–	Tab terminals	TR 684-2 top2	32
Flush-mounted wall installation									
	Roller blinds / Blinds	2	–	–	–	–	Screw terminals	theRolla S031	34
				1	–	–	Screw terminals	theRolla P032	34
Plug-in									
	Weekly program	1	36	–	–	–	Plug-in	theben-eltimo 020 S	36
			33	–	–	–	Plug-in	theben-eltimo 020 S DCF	36

Time and light control

Digital time switches with weekly program, DIN rail, 2 modules



TR 610 top2



TR 612 top2

Description

Common functions

- Digital time switch with weekly program
- DuoFix spring terminals
- Text-oriented user guidance in display
- 56 memory locations
- Interface for OBELISK top2 memory card (PC programming)
- 10 year power reserve (lithium battery)
- Zero-cross switching for relay-saving switching and high lamp loads (not with 24 V devices)
- ON-OFF switching times
- Switching preselection
- Permanent switching ON/OFF
- Integrated operating hour counter
- Holiday program
- Display back light (can be turned off)
- PIN coding
- Automatic summer/winter time changeover

TR 610 top2

- 1 channel

TR 612 top2

- 2 channels

Product selection

Program	Program functions	Number of channels	Switching load < 1 mA	Operating voltage	Type	Article number
Weekly program	ON-OFF	1	–	230 – 240 V AC	TR 610 top2	6100103*
			√	230 – 240 V AC	TR 610 top2 G	6100110
			–	12 – 24 V UC	TR 610 top2 24V	6104100
		2	–	230 – 240 V AC	TR 612 top2	6120103*
				12 – 24 V UC	TR 612 top2 24V	6124100

* Languages: EN, ES, FR, PT, DE (other article numbers with additional languages upon request)

UL approved articles available upon request

Technical data

	TR 610 top2	TR 610 top2 G	TR 610 top2 24V	TR 612 top2	TR 612 top2 24V
Operating voltage	230 – 240 V AC	230 – 240 V AC	12 – 24 V UC	230 – 240 V AC	12 – 24 V UC
Frequency	50 – 60 Hz				
Width	2 modules				
Installation type	DIN rail				
Power reserve	10 years				
Switching capacity at 250 V AC, cos φ = 1	16 A				
Switching capacity at 250 V AC, cos φ = 0,6	10 A	2 A		10 A	2 A
Incandescent / halogen lamp load	2600 W	1400 W		2600 W	1400 W
Energy saving lamps	170 W	30 W		170 W	30 W
LED lamp < 2 W	30 W	6 W		30 W	6 W
LED lamp 2 – 8 W	100 W	20 W		100 W	20 W
LED lamp > 8 W	120 W	25 W		120 W	25 W
Fluorescent lamp load (electronic ballast)	650 W	–		650 W	–
Switching capacity min.	Approx. 10 mA	< 1 mA	Approx. 10 mA		
Shortest switching times	1 min				
Time accuracy at 25 °C	typical ± 0,25 s / day (quartz)				
Stand-by consumption	0,8 W	0,8 W	0,3 W	0,8 W	0,3 W
Test approval	CE	–		CE	–
Type of protection	IP 20				
Protection class	II according to EN 60 730-1				
Ambient temperature	–30 °C ... +55 °C				

Accessories



PC set OBELISK top2
↳ Art.No.: 9070409
Details page 279



Memory card OBELISK top2
↳ Art.No.: 9070404
Details page 279

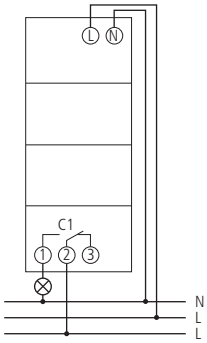


Wall mounting kit 35 mm
↳ Art.No.: 9070064
Details page 278

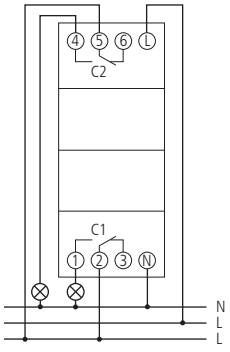


Front panel kit
↳ Art.No.: 9070001
Details page 278

Connection diagrams



TR 610 top2



TR 612 top2

Digital time switches with weekly program, DIN rail, 2 modules



Description

Common functions

- Digital time switch with weekly program
- DuoFix spring terminals
- Text-oriented user guidance in display
- 84 memory locations
- Interface for OBELISK top2 memory card (PC programming)
- OBELISK memory card included in delivery
- 10 year power reserve (lithium battery)
- Zero-cross switching for relay-saving switching and high lamp loads (not with 24 V devices)
- ON-OFF switching times
- Pulse program
- Cycle program
- Switching preselection
- Permanent switching ON / OFF
- Timer countdown
- Integrated operating hour counter
- Holiday program
- 2 random programs
- Display back light (can be turned off)
- PIN coding
- Automatic summer / winter time changeover

TR 611 top2

- 1 channel
- External input

TR 611 top2 RC

- Time synchronisation option via connection of an external DCF or GPS antenna (GPS not with 24 V device)
- Additional power unit required for GPS if only one device is connected to the antenna
- 1 channel
- External input

TR 622 top2

- 2 channel
- 2 external inputs

Product selection

Program	Program functions	Number of channels	External inputs	Time basis	Operating voltage	Type	Article number
Weekly program	ON-OFF, Pulse, Cycle	1	1	Quartz	230 – 240 V AC	TR 611 top2	6110103*
					12 – 24 V UC	TR 611 top2 24V	6114100
				Quartz / DCF77 / GPS	230 – 240 V AC	TR 611 top2 RC	6110300
					12 – 24 V UC	TR 611 top2 RC 24V	6114300
		2	2	Quartz	230 – 240 V AC	TR 622 top2	6220103*
					12 – 24 V UC	TR 622 top2 24V	6224100

* Languages: EN, ES, FR, PT, DE (other article numbers with additional languages on request)

UL-approved articles available upon request

Technical data

	TR 611 top2	TR 611 top2 24V	TR 611 top2 RC	TR 611 top2 RC 24V	TR 622 top2	TR 622 top2 24V
Operating voltage	230–240 V AC	12–24 V UC	230–240 V AC	12–24 V UC	230–240 V AC	12–24 V UC
Frequency	50–60 Hz					
Width	2 modules					
Installation type	DIN rail					
Power reserve	10 years					
Switching capacity at 250 V AC, cos φ = 1	16 A					
Switching capacity at 250 V AC, cos φ = 0,6	10 A	2 A	10 A	2 A	10 A	2 A
Incandescent/halogen lamp load	2600 W	1400 W	2600 W	1400 W	2600 W	1400 W
Energy saving lamps	170 W	30 W	170 W	30 W	170 W	30 W
LED lamp < 2 W	30 W	6 W	30 W	6 W	30 W	6 W
LED lamp 2–8 W	100 W	20 W	100 W	20 W	100 W	20 W
LED lamp > 8 W	120 W	25 W	120 W	25 W	120 W	25 W
Fluorescent lamp load (electronic ballast)	650 W	–	650 W	–	650 W	–
Switching capacity min.	Approx. 10 mA					
Shortest switching times	1 s					
Time accuracy at 25 °C	typical ± 0,25 s/day (quartz)		typical ± 0,25 s/day (quartz) or DCF77/GPS		typical ± 0,25 s/day (quartz)	
Stand-by consumption	0,8 W	0,3 W	1,4 W	0,9 W	0,8 W	0,3 W
Test approval	✓	–	✓	–	✓	–
Type of protection	IP 20					
Protection class	II according to EN 60 730-1					
Ambient temperature	–30 °C ... +55 °C					

Accessories



PC set OBELISK top2
↳ Art.No.: 9070409
Details page 279



Memory card OBELISK top2
↳ Art.No.: 9070404
Details page 279



Wall mounting kit 35 mm
↳ Art.No.: 9070064
Details page 278

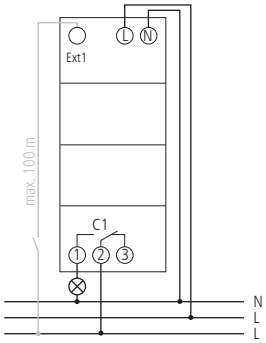
Antenna top2 RC-DCF
Details page 279

Front panel kit
Details page 278

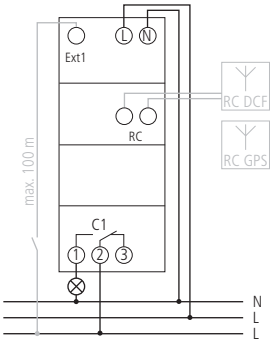
Antenna top2 RC-GPS
Details page 279

Power unit top2 GPS
Details page 279

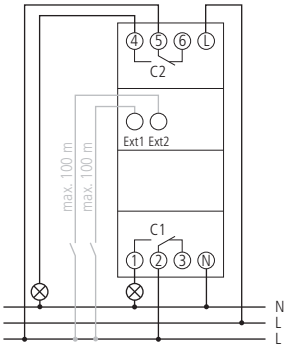
Connection diagrams



TR 611 top2



TR 611 top2 RC



TR 622 top2

Time and light control

Digital time switches with astronomical program, DIN rail, 2 modules



SELEKTA 170 top2



SELEKTA 171 top2 RC



SELEKTA 172 top2

Description

Common functions

- Astronomical time switch with weekly program
- Astronomical time switch function (automatic calculation of sunrise and sunset times for the whole year)
- DuoFix spring terminals
- Text-oriented user guidance in display
- Interface for OBELISK top2 memory card (PC programming)
- 10 year power reserve (lithium battery)
- Zero-cross switching for relay-saving switching and high lamp loads (not with 24 V devices)
- Calculated astronomical switching times
- Programmable ON-OFF switching times
- Switching preselection
- Permanent switching ON/OFF
- Integrated operating hour counter
- Holiday program
- Display back light (can be turned off)
- PIN coding
- Automatic summer/winter time changeover

SELEKTA 170 top2

- 1 channel
- 56 memory locations

SELEKTA 171 top2 RC

- Time synchronisation via connection of external DCF or GPS antennas, additional posititioning for astronomical program with GPS (GPS not with 24 V device)
- Additional power unit required for GPS if only one device is connected to the antenna
- 1 channel
- External input
- 84 memory locations
- 3 special programs with yearly date function per channel
- Count-down timer

SELEKTA 172 top2

- 2 channels
- 84 memory locations
- Channel 1 or channel 2 can also be used purely as time switch channel
- 2 external inputs
- 3 special programs with yearly date function per channel
- Count-down timer

Product selection

Program	Number of channels	External inputs	Time basis	Operating voltage	Type	Article number
Astronomical program, weekly program	1	–	Quartz	230–240 V AC	SELEKTA 170 top2	1700100
				12–24 V UC	SELEKTA 170 top2 24V	1704100
		1	Quartz/DCF77/GPS	230–240 V AC	SELEKTA 171 top2 RC	1710100
				12–24 V UC	SELEKTA 171 top2 RC 24V	1714100
	2	2	Quartz	230–240 V AC	SELEKTA 172 top2	1720100
				12–24 V UC	SELEKTA 172 top2 24V	1724100

UL-approved articles available upon request

Technical data

	SELEKTA 170 top2	SELEKTA 170 top2 24V	SELEKTA 171 top2 RC	SELEKTA 171 top2 RC 24V	SELEKTA 172 top2	SELEKTA 172 top2 24V
Operating voltage	230–240 V AC	12–24 V UC	230–240 V AC	12–24 V UC	230–240 V AC	12–24 V UC
Frequency	50–60 Hz					
Width	2 modules					
Installation type	DIN rail					
Power reserve	10 years					
Switching capacity at 250 V AC, cos φ = 1	16 A					
Switching capacity at 250 V AC, cos φ = 0,6	10 A	2 A	10 A	2 A	10 A	2 A
Incandescent/halogen lamp load	2600 W	1400 W	2600 W	1400 W	2600 W	1400 W
Energy saving lamps	170 W	30 W	170 W	30 W	170 W	30 W
LED lamp < 2 W	30 W	6 W	30 W	6 W	30 W	6 W
LED lamp 2–8 W	100 W	20 W	100 W	20 W	100 W	20 W
LED lamp > 8 W	120 W	25 W	120 W	25 W	120 W	25 W
Fluorescent lamp load (electronic ballast)	650 W	–	650 W	–	650 W	–
Switching capacity min.	Approx. 10 mA					
Shortest switching times	1 min					
Time accuracy at 25 °C	typical ± 0,25 s/day (quartz)		typical ± 0,25 s/day (quartz) or DCF77/GPS		typical ± 0,25 s/day (quartz)	
Stand-by consumption	0,8 W	0,2 W	1,4 W	0,8 W		0,2 W
Test approval	✓	–	✓	–	✓	–
Type of protection	IP 20					
Protection class	II according to EN 60 730-1					
Ambient temperature	–30 °C ... +55 °C					

Accessories



PC set OBELISK top2
↳ Art.No.: 9070409
Details page 279



Memory card OBELISK top2
↳ Art.No.: 9070404
Details page 279



Wall mounting kit 35 mm
↳ Art.No.: 9070064
Details page 278

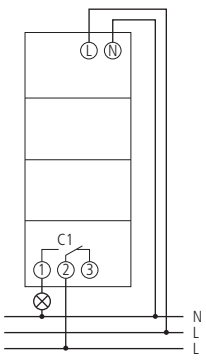
Front panel kit
Details page 278

Antenna top2 RC-DCF
Details page 279

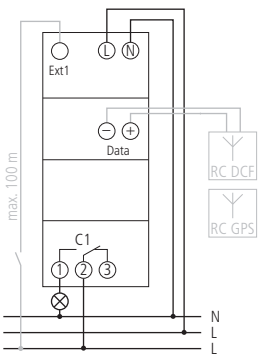
Antenna top2 RC-GPS
Details page 279

Power unit top2 GPS
Details page 279

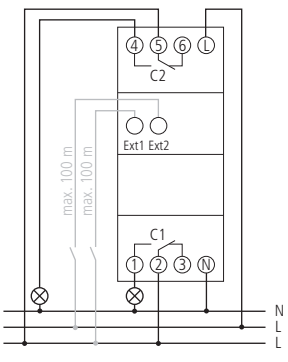
Connection diagrams



SELEKTA 170 top2



SELEKTA 171 top2 RC



SELEKTA 172 top2

Time and light control

Digital time switches with yearly and astronomical program, DIN rail



TR 641 top2 | TR 642 top2 RC | TR 644 top2

Description

Common functions

- Digital time switch with yearly and astronomical time program
- DuoFix spring terminals
- Text-oriented user guidance in display
- 800 memory locations
- Interface for OBELISK top2 memory card (PC programming)
- 8 year power reserve (lithium battery)
- Zero-cross switching for leay-saving swit-ching and high lamp loads (not with 24 V devices)
- Automatic summer/winter time changeover
- ON-OFF switching times
- Pulse program
- Cycle program
- Extensive yearly clock functions
- Astronomical time switch function (automatic calculation of sunrise and sunset times for the whole year)
- Switching preselection
- Permanent switching ON/OFF
- Count-down timer
- Integrated operating hour counter
- Holiday program
- 2 random programs
- Display back light (can be turned off)
- PIN coding

TR 641 top2

- 1 channel
- External input

TR 641 top2 RC

- Time synchronisation via connection of external DCF or GPS antennas, additional posititio-ning for astronomical program with GPS
- 1 channel
- External input
- Extension module can be connected
- Memory card OBELISK top2 included in delivery

TR 642 top2

- 2 channels
- 2 external inputs

TR 642 top2 RC

- Time synchronisation via connection of external DCF or GPS antennas, additional posititio-ning for astronomical program with GPS
- 2 channels
- 2 external inputs
- Extension module can be connected
- Memory card OBELISK top2 included in delivery

TR 644 top2

- 4 channels
- 4 external inputs

TR 644 top2 RC

- Time synchronisation via connection of external DCF or GPS antennas, additional posititio-ning for astronomical program with GPS
- 4 channels
- 4 external inputs
- Extension module can be connected
- Memory card OBELISK top2 included in delivery

Product selection

Program	Number of channels	External inputs	Time basis	Memory card supplied	Program functions	Operating voltage	Type	Article number
Yearly program, astronomical program	1	1	Quartz	–	ON-OFF, Pulse, Cycle	110 – 240 V AC	TR 641 top2	6410100
			Quartz/DCF77/GPS	√	ON-OFF, Pulse, Cycle	110 – 240 V AC	TR 641 top2 RC	6410300
						12 – 24 V UC	TR 641 top2 RC 24V	6414300
	2	2	Quartz	–	ON-OFF, Pulse, Cycle	110 – 240 V AC	TR 642 top2	6420100
			Quartz/DCF77/GPS	√	ON-OFF, Pulse, Cycle	110 – 240 V AC	TR 642 top2 RC	6420300
						12 – 24 V UC	TR 642 top2 RC 24V	6424300
	4	4	Quartz	–	ON-OFF, Pulse, Cycle	110 – 240 V AC	TR 644 top2	6440100
			Quartz/DCF77/GPS	√	ON-OFF, Pulse, Cycle	110 – 240 V AC	TR 644 top2 RC	6440300

Technical data

	TR 641 top2	TR 642 top2	TR 641 top2 RC	TR 642 top2 RC	TR 644 top2	TR 644 top2 RC	TR 641 top2 RC 24V	TR 642 top2 RC 24V
Operating voltage	110–240 V AC						12–24 V UC	
Frequency	50–60 Hz							
Width	3 modules				4 modules		3 modules	
Installation type	DIN rail							
Power reserve	8 years							
Switching capacity at 250 V AC, cos φ = 1	16 A				2 x 16 A | 2 x 10 A		16 A	
Switching capacity at 250 V AC, cos φ = 0,6	10 A						2 A	
Incandescent/halogen lamp load 230 V	2600 W				2300 W		1400 W	
Incandescent/halogen lamp load 120 V	1300 W				1150 W		–	
Energy saving lamps 230 V	37 x 7 W, 30 x 11 W, 26 x 15 W, 26 x 20 W, 11 x 23 W						7 x 7 W, 6 x 11 W, 5 x 15 W, 5 x 20 W, 4 x 23 W	
Energy saving lamps 120 V	18 x 7 W, 15 x 11 W, 13 x 15 W, 13 x 20 W, 11 x 23 W						–	
LED lamp < 2 W	50 W						–	
LED lamp 2–8 W	180 W						–	
LED lamp > 8 W	200 W						–	
Switching capacity min.	Approx. 10 mA							
Shortest switching times	1 s							
Time accuracy at 25 °C	≤ ± 0.5 s/day (quartz)		≤ ± 0,5 s/day (quartz) or DCF77/GPS		≤ ± 0.5 s/day (quartz)	≤ ± 0,5 s/day (quartz) or DCF77/GPS		
Stand-by consumption	0,6 W	0,6 W	1,2 W	1,2 W	0,5 W	1,3 W	1,5 W	
Type of protection	IP 20							
Protection class	II according to EN 60 730-1							
Ambient temperature	–30 °C … +45 °C							

Accessories



EM 4 top2
for TR 641 top2 RC, TR 642 top2 RC, TR 644 top2 RC
↳ Art.No.: 6490104
Details page 26



EM LAN top2
for TR 641 top2 RC, TR 642 top2 RC, TR 644 top2 RC
↳ Art.No.: 6490900
Details page 26



Antenna top2 RC-DCF
for TR 641 top2 RC, TR 642 top2 RC, TR 644 top2 RC
↳ Art.No.: 9070410
Details page 279

Wall mounting kits
Details page 278

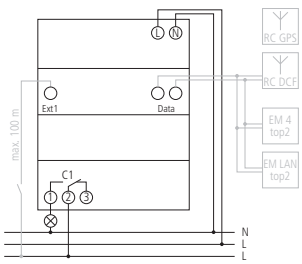
Front panel kit
Details page 278

Antenna top2 RC-GPS
Details page 279

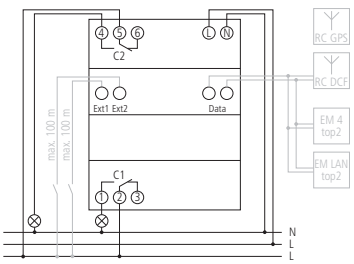
Memory card OBELISK top2
Details page 279

PC set OBELISK top2
Details page 279

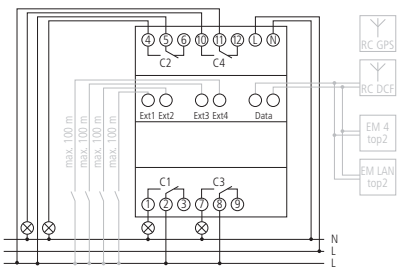
Connection diagrams



TR 641 top2 RC



TR 642 top2 RC



TR 644 top2 RC

Digital time switches, extension modules, DIN rail, 3 modules, 4 modules



EM LAN top2



EM 4 top2

Description

EM LAN top2

- Ethernet communication module for remote access via LAN-DSL network to time switches TR 641 top2 RC, TR 642 top2 RC and TR 644 top2 RC
- Remote programming using OBELISK top2 PC software
- Direct remote access to time switch (e.g. reading out switching status, performing manual switching, checking time)
- Width: 3 modules

EM 4 top2

- Extension module for TR 641 top2 RC, TR 642 top2 RC and TR 644 top2 RC
- 4 channels
- Width: 4 modules
- DuoFix spring terminals
- 4 external inputs
- Switching preselection
- Permanent ON/OFF switching
- 4 LEDs for displaying switching status
- Zero-cross switching for relay-saving switching and high lamp loads

Product selection

Type	Article number
EM LAN top2	6490900
EM 4 top2	6490104

Technical data

	EM LAN top2	EM 4 top2
Operating voltage	230 V AC	110 – 240 V AC
Frequency	50 – 60 Hz	
Width	3 modules	4 modules
Installation type	DIN rail	
Switching capacity at 250 V AC, cos φ = 1	–	2 x 16 A | 2 x 10 A
Switching capacity at 250 V AC, cos φ = 0,6	–	10 A
Incandescent/halogen lamp load 230 V	–	2300 W
Incandescent/halogen lamp load 120 V	–	1150 W
Energy saving lamps 230 V	–	22 x 7 W, 18 x 11 W
Energy saving lamps 120 V	–	11 x 7 W, 9 x 11 W
Switching capacity min.	–	Approx. 10 mA
Stand-by consumption	2,8 W	1,5 W
Type of protection	IP 20	
Protection class	II according to EN 60 730-1	
Ambient temperature	– 30 °C ... +50 °C	– 30 °C ... +55 °C

Accessories

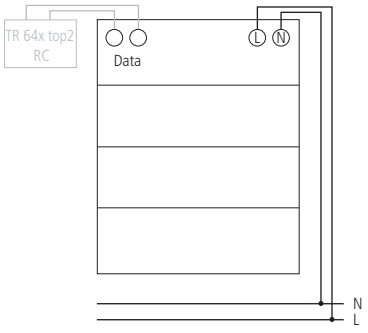


Front panel kit
↳ Art.No.: 9070001
Details page 278

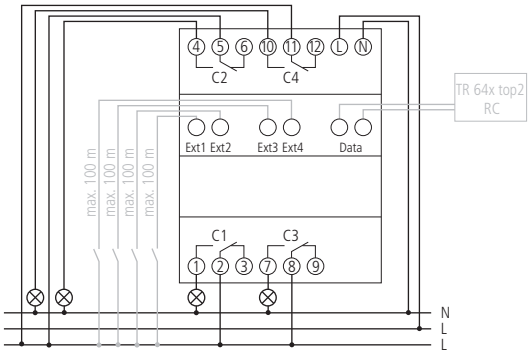
Wall mounting kit 52,5 mm
Details page 278

Wall mounting kit 70 mm
Details page 278

Connection diagrams



EM LAN top2



EM 4 top2

Time and light control

Digital time switches with weekly and / or astronomical program, DIN rail, 1 module



TR 608 top2 S



TR 609 top2 S



SELEKTA 175 top2

Description

Common functions
- 1 channel
- DuoFix spring terminals
- Text-oriented user guidance in display
- Interface for OBELISK top2 memory card (PC programming)
- 10 year power reserve (lithium battery)
- Switching preselection
- Integrated operating hour counter
- Holiday program
- PIN coding
- Automatic summer / winter time changeover

TR 608 top2 S
- Digital time switch with weekly program
- 56 memory locations
- ON-OFF switching times
- Permanent switching ON / OFF

TR 609 top2 S
- Digital time switch with weekly program
- 84 memory locations
- External input
- Pulse program
- Cycle program
- Timer countdown
- 2 random programs
- ON-OFF switching times
- Permanent switching ON / OFF

SELEKTA 175 top2
- Astronomical time switch with weekly program
- External input
- 56 memory locations
- Astronomical time switch function (automatic calculation of sunrise and sunset times for the whole year)
- Programmable ON-OFF switching times
- Permanent switching ON / OFF

Product selection

Program	Number of channels	Memory locations	Program functions	Operating voltage	Type	Article number
Weekly program	1	56	ON-OFF	230 – 240 V AC	TR 608 top2 S	6080101
		84	ON-OFF, Pulse, Cycle	230 – 240 V AC	TR 609 top2 S	6090101
Astronomical program, weekly program	1	56	ON-OFF	230 – 240 V AC	SELEKTA 175 top2	1750100

Digital time switches with weekly and / or astronomical program, DIN rail, 1 module

Technical data

	TR 608 top2 S	TR 609 top2 S	SELEKTA 175 top2
Operating voltage	230 – 240 V AC		
Frequency	50 – 60 Hz		
Width	1 module		
Installation type	DIN rail		
Power reserve	10 years		
Type of contact	Changeover contact	NO contact	
Switching capacity at 250 V AC, cos φ = 1	16 A		
Switching capacity at 250 V AC, cos φ = 0,6	4 A		
Incandescent / halogen lamp load	1000 W	2000 W	
Energy saving lamps	30 W	300 W	
LED lamp < 2 W	6 W	55 W	
LED lamp 2 – 8 W	20 W	180 W	
LED lamp > 8 W	24 W	200 W	
Switching capacity min.	10 mA		
Shortest switching times	1 min	1 s	1 min
Time accuracy at 25 °C	typical ± 0,25 s / day (quartz)		
Stand-by consumption	0,4 W		
Type of protection	IP 20		
Protection class	II according to EN 60 730-1		
Ambient temperature	– 25 °C ... +55 °C		

Accessories



Wall mounting kit 17,5 mm
↳ Art.No.: 9070065
Details page 278

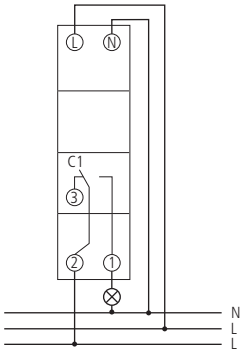


PC set OBELISK top2
↳ Art.No.: 9070409
Details page 279

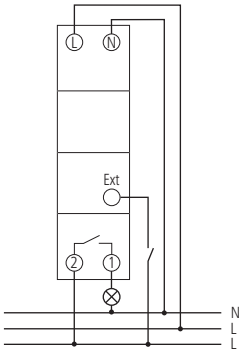


Memory card OBELISK top2
↳ Art.No.: 9070404
Details page 279

Connection diagrams



TR 608 top2 S



TR 609 top2 S, SELEKTA 175 top2

Time and light control

Digital time switches, Front panel installation / wall installation



TR 635 top2

TR 636 top2

Description

Common functions

- Digital time switch with weekly program
- Text-based operator guidance in the display
- 84 memory locations
- Interface for OBELISK top2 memory card (PC programming)
- 10 year power reserve (lithium battery)
- ON-OFF switching times
- Pulse program
- Cycle program
- Switching preselection
- Permanent ON / OFF switching
- Count-down timer
- Integrated hour counter
- Holiday program
- 2 random programs
- Back lighting (can be turned off)
- PIN coding
- Automatic summer / winter time changeover

TR 635 top2

- 1 channel

TR 636 top2

- 2 channels

Product selection

Program	Number of channels	Memory locations	Program functions	Operating voltage	Type	Article number
Weekly program	1	84	ON-OFF, Pulse, Cycle	230 – 240 V AC	TR 635 top2	6350100
	2	84	ON-OFF, Pulse, Cycle	230 – 240 V AC	TR 636 top2	6360100

Additional technical data at: www.theben.de / product / Articlenumber

Technical data

	TR 635 top2	TR 636 top2
Operating voltage	230 – 240 V AC	
Frequency	50 – 60 Hz	
Installation type	Front panel installation / wall installation	
Power reserve	10 years	
Switching capacity at 250 V AC, cos φ = 1	16 A	6 A
Switching capacity at 250 V AC, cos φ = 0,6	10 A	6 A
Incandescent / halogen lamp load	2300 W	1200 W
Energy saving lamps	90 W	
LED lamp < 2 W	20 W	
LED lamp 2 – 8 W	50 W	
Shortest switching times	1 s	
Time accuracy at 25 °C	≤ ± 0.5 s / day (quartz)	
Stand-by consumption	0,9 W	1,1 W
Type of protection	IP 20	
Protection class	II according to EN 60 730-1	
Ambient temperature	– 30 °C ... +55 °C	

Accessories



PC set OBELISK top2
↳ Art.No.: 9070409
Details page 279

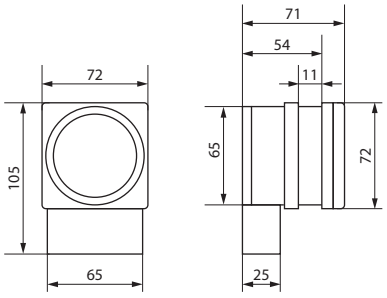


Memory card OBELISK top2
↳ Art.No.: 9070404
Details page 279



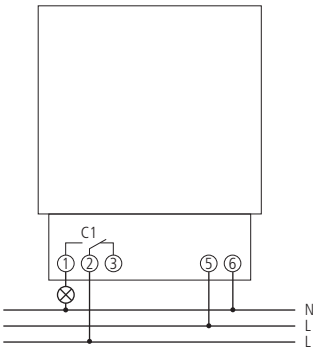
Snap-on mounting 72 x 72
↳ Art.No.: 9070071
Details page 278

Scale drawings

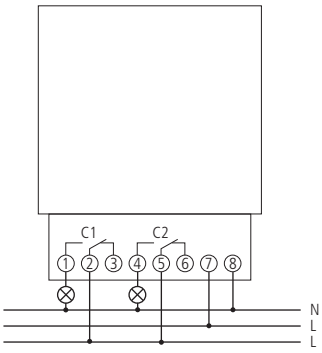


TR 635 top2, TR 636 top2

Connection diagrams



TR 635 top2



TR 636 top2

Time and light control

Digital time switches, timer module without plug-in base



TR 684-1 top2



TR 684-2 top2

Description

Common functions

- Digital time switch with weekly program
- Timer module without plug-in base
- Connection by 4.8 mm AMP flat plug for original installation standard devices
- For installation in regulation and control
- Text-based operator guidance in the display
- 56 memory locations
- Interface for OBELISK top2 memory card (PC programming)
- 10 year power reserve (lithium battery)
- ON-OFF switching times
- Switching preselection
- Permanent ON/OFF switching
- Integrated hour counter
- Holiday program
- Back lighting (can be turned off)
- PIN coding
- Automatic summer/winter time changeover

TR 684-1 top2

- 1 channel

TR 684-2 top2

- 2 channels

Product selection

Program	Number of channels	Memory locations	Program functions	Operating voltage	Type	Article number
Weekly program	1	56	ON-OFF	230–240 V AC	TR 684-1 top2	6840100
	2	56	ON-OFF	230–240 V AC	TR 684-2 top2	6840101

Technical data

	TR 684-1 top2	TR 684-2 top2
Operating voltage	230–240 V AC	
Frequency	50–60 Hz	
Installation type	Front panel installation/wall installation	
Power reserve	10 years	
Switching capacity at 250 V AC, cos φ = 1	6 A	
Switching capacity at 250 V AC, cos φ = 0,6	1 A	
Shortest switching times	1 min	
Time accuracy at 25 °C	≤ ± 0.5 s/day (quartz)	
Stand-by consumption	1 W	
Type of protection	IP 20	
Protection class	II according to EN 60 730-1	
Ambient temperature	–10 °C … +55 °C	

Accessories



Multiple contact strip
↳ Art.No.: 9075141
Details page 278

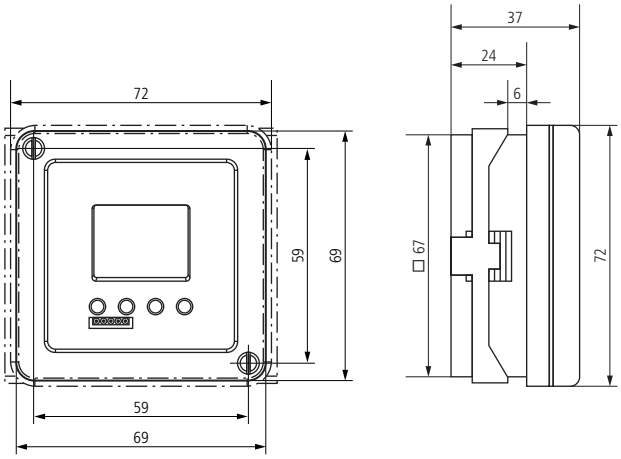


PC set OBELISK top2
↳ Art.No.: 9070409
Details page 279



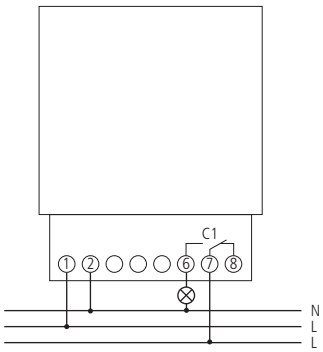
Memory card OBELISK top2
↳ Art.No.: 9070404
Details page 279

Scale drawings

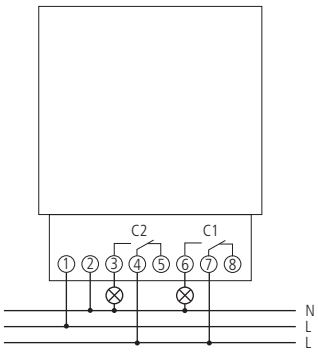


TR 684-1 top2, TR 684-2 top2

Connection diagrams



TR 684-1 top2



TR 684-2 top2



theRolla S031 theRolla P032

Description

Common functions

- Digital time switch for drive control of roller blinds and blinds
- Integrated buttons for manual control (Up / Down / Stop button)
- Slide switch for setting the operating mode (Manual / Auto)
- Programming of intermediate position and ventilation position
- Blocking time (prevents the roller blinds from moving up or down too early, due to the Astro function)
- Holiday program (presence simulation)
- Astro position selectable by city list or coordinates (longitude / latitude)
- Text-based user guidance in the display
- Automatic summer-winter time changeover
- Removable control panel
- Replaceable battery (type CR 2032)

theRolla S031

- „Astro evening" program - opens roller blinds and blinds according to a programmed switching time and closes them automatically at sunset via Astro command
- „Individual switching times" program - opens and closes roller blinds and blinds according to a programmed switching time
- Times programmable for two fixed blocks (Monday-Friday, Saturday-Sunday)

theRolla P032

- Comfort time switch
- „Astro" program - opens and closes roller blinds and blinds at sunrise and sunset times (Astro times).
- „Astro evening" program - opens roller blinds and blinds according to a programmed switching time and closes them automatically at sunset via Astro command
- „Individual switching times" program - opens and closes roller blinds and blinds according to programmed switching times
- Additional second special program
- Times individually programmable for each weekday
- Times programmable for two fixed blocks (Monday-Friday, Saturday-Sunday)
- Times programmable for one fixed block (Monday-Sunday)
- Connection of an optional light sensor (sun protection / dimming function)

Product selection

Program	External light sensor connectable	Comfort functions	Type	Article number
Weekly program, Astronomical programm	–	–	theRolla S031	0310100
	√	√	theRolla P032	0320100

Technical data

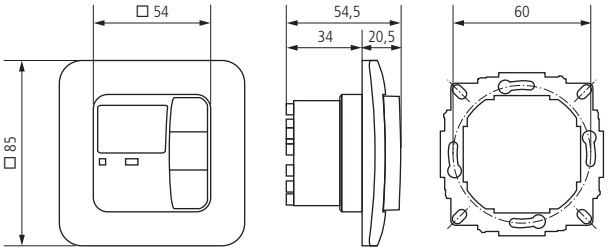
	theRolla S031	theRolla P032
Operating voltage	230–240 V AC	
Frequency	50–60 Hz	
Installation type	Wall installation	
Switching capacity at 250 V AC, cos φ = 1	5 A	
Type of protection	IP 20	
Protection class	II	
Battery	1 x CR 2032	
Type of contact	2 x NO contact	
Ambient temperature	0 °C ... +55 °C	

Accessories

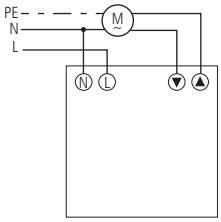


Light sensor theRolla
for theRolla P032
↳ Art.No.: 9070926
Details page 278

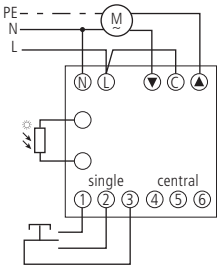
Scale drawings



Connection diagrams



theRolla S031



theRolla P032



theben-eltimo 020 S

theben-eltimo 020 S DCF

Description

Common functions
- Digital plug-in timer with weekly program
- Use with earthed sockets
- 1 channel
- Easy operation via keys for program function and day of the week, hours, minutes
- ON-OFF switching times
- Switching preselection
- Permanent switching ON/OFF
- Random program
- Automatic summer/winter time changeover

theben-eltimo 020 S
- 36 memory locations

theben-eltimo 020 S DCF
- DCF radio control
- 33 memory locations

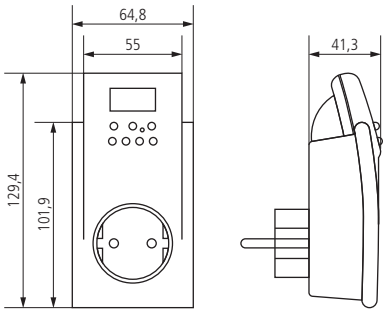
Product selection

Program	Number of channels	Memory locations	Time basis	Operating voltage	Type	Article number
Weekly program	1	36	Quartz	230 V AC	theben-eltimo 020 S	0200000
		33	Quartz/DCF77	230 V AC	theben-eltimo 020 S DCF	0200300

Technical data

	theben-eltimo 020 S	theben-eltimo 020 S DCF
Operating voltage	230 V AC	
Frequency	50 Hz	
Installation type	Plug-in	
Power reserve	20 days	
Switching capacity at 250 V AC, cos φ = 1	16 A	
Switching capacity at 250 V AC, cos φ = 0,6	2 A	
Incandescent / halogen lamp load	1000 W	
Shortest switching times	1 min	
Time accuracy at 25 °C	≤ ± 1 s / day (quartz)	DCF77 synchronous or ≤ ± 1 s / day (quartz)
Stand-by consumption	0,8 W	
Type of protection	IP 20	
Protection class	II for housing, I for plug system as per EN 62 730-1	
Ambient temperature	–10 °C ... +40 °C	

Scale drawings



theben-eltimo 020 S, theben-eltimo 020 S DCF



A special form of stability

Stability is a precondition for innovative power, Theben offers both. Everyone benefits, our customers, our partners and our employees. Because only those with the required resource can invest in innovation, but also the solid foundations of a company create climate of trust. This kind of predictability has characterised Theben's success for many years. Behind that lies a local virtue, one that is of special importance in times like these, solidarity.

	Program	Number of channels	Type of contact	Power reserve	Shortest switching times	Programmable every	Type of connection	Type	Page
DIN rail, 1 module									
	Daily program	1	NO contact	–	15 min	15 min	Screw terminals	SYN 160 a	40
				3 days	15 min	15 min	Screw terminals	SUL 180 a	40
	Weekly program	1	NO contact	3 days	2 h	2 h	Screw terminals	MEM 190 a	40
DIN rail, 3 modules									
	60 minutes program	1	Changeover contact	–	37,5 s	37,5 s	DuoFix spring terminals	SYN 151 h	42
	Daily program	1	Changeover contact	–	15 min	15 min	DuoFix spring terminals	SYN 161 d	42
				200 hours	15 min	15 min	DuoFix spring terminals	SUL 181 d	42
	Weekly program	1	Changeover contact	200 hours	2 h	2 h	DuoFix spring terminals	SUL 191 w	42
	Daily program	2	Changeover contact	3 days	30 min	15 min	Screw terminals	SUL 188 g	44
	Daily/weekly program with 1/2 day OFF function	1	Changeover contact	3 days	45 min, 12 h	15 min, 12 h	Screw terminals	SUL 188 hw	44
Front panel installation/wall installation									
	Daily program	1	Changeover contact	–	15 min	15 min	Screw terminals	SYN 169 s	46
				3 days	15 min	15 min	Screw terminals	SUL 189 s	46
	Daily program	1	Changeover contact	–	20 min, 2 h	5 min, 30 min	Screw terminals	SYN 269 h	48
				3 days	20 min, 2 h	5 min, 30 min	Screw terminals	SUL 289 h	48
		2	Changeover contact	3 days	20 min, 2 h	5 min, 30 min	Screw terminals	SUL 289 g	48
	60 minutes program	1	Changeover contact	–	1,25 min	18,5 s	Screw terminals	TM 179 h	50
	Daily/weekly program with 1/2 day OFF function	1	Changeover contact	3 days	30 min, 12 h	15 min, 12 h	Screw terminals	SUL 189 hw	50
Wall installation/3-point mounting									
	Daily program	2	Changeover contact	6 days	20 min	5 min	Screw terminals	SUL 285/2 T	52
Plug-in									
	Daily program	1	NO contact	–	15 min	15 min	Plug-in	theben-timer 26	53
								theben-timer 26 IP 44	53
	Weekly program	1	NO contact	–	2 h	2 h	Plug-in	theben-timer 27	53
Surface-mounted									
	Daily and defrost program	2	Changeover contact	–	2 min, 1 h	1 min, 1 h	Screw terminals	FRI 77 g	54
Drive with quick fastening for DIN rail									
	Daily and defrost program	1	Changeover contact	–	2 min, 1 h	1 min, 1 h	Screw terminals	FRI 77 h-2	54
		2	Changeover contact	–	2 min, 1 h	1 min, 1 h	Screw terminals	FRI 77 g-2	54

Analogue time switches, DIN rail, 1 module, switching segments



SYN 160 a



SUL 180 a



MEM 190 a

Description

Common functions
- Analogue time switch
- 1 channel
- Screw terminals
- Manual switch with 3 positions: Permanent ON / AUTO / continuous OFF

SYN 160 a
- Daily program
- Without power reserve
- 96 switching segments
- Synchronised with mains
- Shortest switching time: 15 minutes

SUL 180 a
- Daily program
- With power reserve (exchangeable NiMH rechargeable battery)
- 96 switching segments
- Quartz controlled
- Shortest switching time: 15 minutes

MEM 190 a
- Weekly program
- With power reserve (exchangeable NiMH rechargeable battery)
- 84 switching segments
- Quartz controlled
- Shortest switching time: 2 hours

Product selection

Program	Number of channels	Power reserve	Shortest switching times	Programmable every	Type of contact	Operating voltage	Type	Article number
Daily program	1	–	15 min	15 min	NO contact	230 V AC	SYN 160 a	1600001
		3 days	15 min	15 min	NO contact	230 – 240 V AC	SUL 180 a	1800001
Weekly program	1	3 days	2 h	2 h	NO contact	230 – 240 V AC	MEM 190 a	1900001

Additional technical data at: www.theben.de / product / Articlenumber

Technical data

	SYN 160 a	SUL 180 a	MEM 190 a
Operating voltage	230 V AC	230 – 240 V AC	
Frequency	50 Hz	50 – 60 Hz	
Width	1 module		
Installation type	DIN rail		
Program	Daily program		Weekly program
Power reserve	–	3 days	
Switching capacity at 250 V AC, cos φ = 1	16 A		
Switching capacity at 250 V AC, cos φ = 0,6	4 A		
Incandescent / halogen lamp load	1000 W		
Shortest switching times	15 min		2 h
Programmable every	15 min		2 h
Time accuracy at 25 °C	Synchronised with mains	≤ ± 1 s / day (quartz)	
Stand-by consumption	0,9 W	0,5 W	
Test approval			
Type of protection	IP 20		
Protection class	II according to EN 60 730-1		
Ambient temperature	– 25 °C ... +50 °C	– 10 °C ... +50 °C	

Accessories

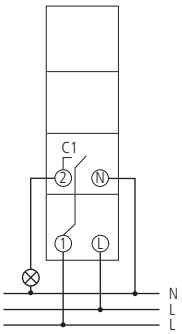


Front panel kit
↳ Art.No.: 9070001
Details page 278



Wall mounting kit 17,5 mm
↳ Art.No.: 9070065
Details page 278

Connection diagrams



SYN 160 a, SUL 180 a, MEM 190 a

Analogue time switches, DIN rail, 3 modules, switching segments



SYN 151 h | SUL 181 d | SUL 191 w

Description

Common functions
- Analogue time switch
- 1 channel
- DuoFix spring terminals
- Switching preselection
- Manual switch with 3 positions: Continuous ON / AUTO / continuous OFF
- Switching status display

SYN 151 h
- 60 minute program
- Without power reserve
- 96 switching segments
- Synchronised with mains
- Shortest switching time: 37.5 seconds

SYN 161 d
- Daily program
- Without power reserve
- 96 switching segments
- Synchronised with mains
- Shortest switching time: 15 minutes
- Clock hands for time display and in addition 12 / 24 hour recognition
- Simple summer / winter time correction

SUL 181 d
- Daily program
- With power reserve (NiMH rechargeable battery)
- 96 switching segments
- Quartz controlled
- Shortest switching time: 15 minutes
- Clock hands for time display and in addition 12 / 24 hour recognition
- Simple summer / winter time correction

SUL 191 w
- Weekly program
- With power reserve (NiMH rechargeable battery)
- 84 switching segments
- Quartz controlled
- Shortest switching time: 2 hours
- Clock hands for time display and in addition 12 / 24 hour recognition
- Simple summer / winter time correction

SUL 181 h 12 / 24 V UC

Without picture
- Daily program
- 48 switching segments
- Screw terminals

Product selection

Program	Number of channels	Power reserve	Shortest switching times	Programmable every	Type of contact	Operating voltage	Type	Article number
60 minutes program	1	–	37,5 s	37,5 s	Changeover contact	230 V AC	SYN 151 h	1510011
Daily program	1	–	15 min	15 min	Changeover contact	230 V AC	SYN 161 d	1610011
		200 hours	15 min	15 min	Changeover contact	110 – 230 V AC	SUL 181 d	1810011
		3 days	30 min	30 min	Changeover contact	24 V UC	SUL 181 h 24 V	1814008
						12 V UC	SUL 181 h 12 V	1817008
Weekly program	1	200 hours	2 h	2 h	Changeover contact	110 – 230 V AC	SUL 191 w	1910011

Additional technical data at: www.theben.de / product / Articlenumber

Technical data

	SYN 151 h	SYN 161 d	SUL 181 d	SUL 191 w	SUL 181 h 12 V	SUL 181 h 24 V
Operating voltage	230 V AC		110–230 V AC		12 V UC	24 V UC
Frequency	50 Hz		50–60 Hz			
Width	3 modules					
Installation type	DIN rail					
Program	60 minutes program	Daily program		Weekly program	Daily program	
Power reserve	–		200 hours, approx. 100 hours at 110 V		3 days	
Switching capacity at 250 V AC, cos φ = 1	10 A	16 A				
Switching capacity at 250 V AC, cos φ = 0,6	4 A					
Incandescent/halogen lamp load	1100 W					
Shortest switching times	37,5 s	15 min		2 h	30 min	
Programmable every	37,5 s	15 min		2 h	30 min	
Time accuracy at 25 °C	Synchronised with mains		≤ ± 1 s/day (quartz)			
Stand-by consumption	0,9 W	0,5 W			0,05 W	0,1 W
Test approval					–	
Type of protection	IP 20					
Protection class	II according to EN 60 730-1					
Ambient temperature	–20 °C … +55 °C				–20 °C … +50 °C	

Accessories

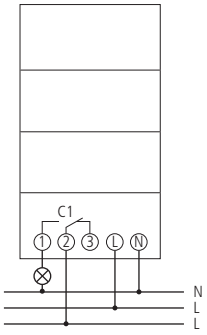


Wall mounting kit 52,5 mm
↳ Art.No.: 9070050
Details page 278

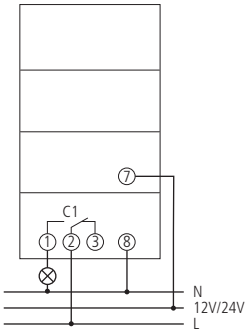


Front panel kit
↳ Art.No.: 9070001
Details page 278

Connection diagrams



SYN 151 h, SYN 161 d,
SUL 181 d, SUL 191 w



SUL 181 h 12 V, SUL 181 h 24 V

Analogue time switches, DIN rail, 3 modules, tappets



SUL 188 g



SUL 188 hw

Description

Common functions

- Analogue time switch
- With power reserve (NiMH rechargeable battery)
- Quartz controlled
- Tappets
- Screw terminals
- Switching status display
- Operating indication

SUL 188 g

- Daily program
- 2 channels
- Fine adjustment to set the time to the minute
- Shortest switching time: 30 minutes
- 10 tappets included in delivery

SUL 188 hw

- Daily/weekly program and 1/2 day OFF function for the weekdays
- 1 channel (with series connection of the 2 contacts)
- Tappets and turning segments
- Shortest switching time: 45 minutes (12 hours for the 1/2 day OFF function)
- 6 tappets included in delivery

Product selection

Program	Number of channels	Power reserve	Shortest switching times	Programmable every	Type of contact	Operating voltage	Type	Article number
Daily program	2	3 days	30 min	15 min	Changeover contact	230 V AC	SUL 188 g	1880033
Daily/weekly program with 1/2 day OFF function	1	3 days	45 min, 12 h	15 min, 12 h	Changeover contact	230 V AC	SUL 188 hw	1880108

Additional technical data at: www.theben.de/product/ Articlenumber

Technical data

	SUL 188 g	SUL 188 hw
Operating voltage	230 V AC	
Frequency	45 – 60 Hz	
Width	3 modules	
Installation type	DIN rail	
Program	Daily program	Daily/weekly program with 1/2 day OFF function
Power reserve	3 days	
Switching capacity at 250 V AC, cos φ = 1	10 A	
Switching capacity at 250 V AC, cos φ = 0,6	4 A	
Shortest switching times	30 min	45 min, 12 h
Programmable every	15 min	15 min, 12 h
Time accuracy at 25 °C	≤ ± 1 s/day (quartz)	
Stand-by consumption	0,5 W	
Test approval		
Type of protection	IP 20	
Protection class	II according to EN 60 730-1	
Ambient temperature	–20 °C ... +55 °C	

Accessories

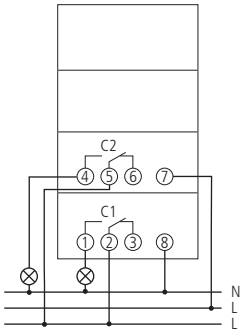


Front panel kit
↳ Art.No.: 9070001
Details page 278

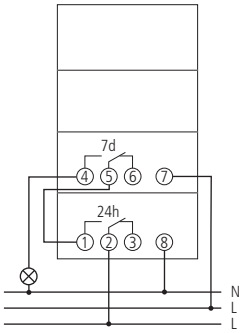


Terminal cover 52,5 mm
↳ Art.No.: 9070061
Details page 278

Connection diagrams



SUL 188 g



SUL 188 hw

Analogue time switches, Front panel installation / wall installation, switching segments



SYN 169 s

SUL 189 s

Description

Common functions
- Analogue time switch
- 1 channel
- Daily program
- 96 switching segments
- Shortest switching time: 15 minutes
- Clock hands for time display
- Switching preselection
- Permanent ON / OFF switch
- Switching status display
- Simple summer / winter time correction

SYN 169 s
- Without power reserve
- Synchronised with mains

SUL 189 s
- With power reserve (NiMH rechargeable battery)
- Quartz controlled

Product selection

Program	Number of channels	Power reserve	Shortest switching times	Programmable every	Type of contact	Operating voltage	Type	Article number
Daily program	1	–	15 min	15 min	Changeover contact	230 V AC	SYN 169 s	1690801
		3 days	15 min	15 min	Changeover contact	230 V AC	SUL 189 s	1890801
						110 V AC	SUL 189 s 110V	1891801

Analogue time switches, Front panel installation / wall installation, switching segments

Technical data

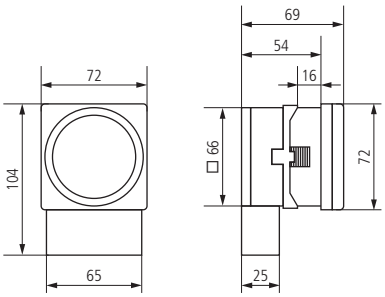
	SYN 169 s	SUL 189 s	SUL 189 s 110V
Operating voltage	230 V AC		110 V AC
Frequency	50 Hz	50–60 Hz	
Installation type	Front panel installation / wall installation		
Program	Daily program		
Power reserve	–	3 days, full power reserve approx. 3 days after connection to operating voltage	
Switching capacity at 250 V AC, cos φ = 1	10 A		
Switching capacity at 250 V AC, cos φ = 0,6	2 A		
Shortest switching times	15 min		
Programmable every	15 min		
Time accuracy at 25 °C	Synchronised with mains	≤ ± 1 s / day (quartz)	
Stand-by consumption	0,9 W	0,5 W	
Test approval			–
Type of protection	IP 20		
Protection class	II according to EN 60 730-1		
Ambient temperature	–10 °C ... +55 °C		

Accessories



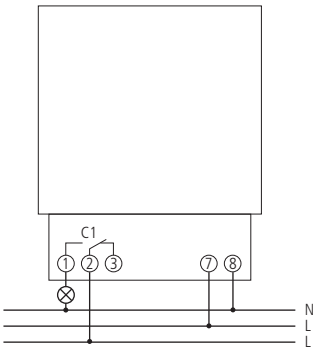
Snap-on mounting 72 x 72
↳ Art.No.: 9070071
Details page 278

Scale drawings



SYN 169 s, SUL 189 s

Connection diagrams



SYN 169 s, SUL 189 s

Analogue time switches, Front panel installation / wall installation, tappets



Description

Common functions

- Analogue time switch with daily or weekly program (switching disc can be turned)
- Tappets
- Shortest switching time: 20 minutes or 2 hours
- Clock hands for time display
- Switching status display

SYN 269 h

- 1 channel
- Without power reserve
- Synchronised with mains
- Switching preselection
- Permanent ON / OFF switch
- Simple summer / winter time correction
- 32 tappets included in delivery

SUL 289 h

- 1 channel
- With power reserve (NiMH rechargeable battery)
- Quartz controlled
- Switching preselection
- Permanent ON / OFF switch
- Simple summer / winter time correction
- 32 tappets included in delivery

SUL 289 g

- 2 channels
- With power reserve (NiMH rechargeable battery)
- Quartz controlled
- 49 tappets included in delivery

Product selection

Program	Number of channels	Power reserve	Shortest switching times	Programmable every	Type of contact	Operating voltage	Type	Article number
Daily program	1	–	20 min, 2 h	5 min, 30 min	Changeover contact	230 V AC	SYN 269 h	2690008
		3 days	20 min, 2 h	5 min, 30 min	Changeover contact	230 V AC	SUL 289 h	2890008
	2	3 days	20 min, 2 h	5 min, 30 min	Changeover contact	230 V AC	SUL 289 g	2890033

Technical data

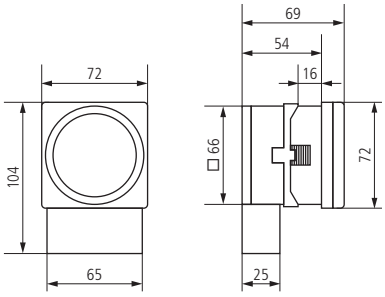
	SYN 269 h	SUL 289 h	SUL 289 g
Operating voltage	230 V AC		
Frequency	50 Hz	50 – 60 Hz	
Installation type	Front panel installation / wall installation		
Program	Daily program, Weekly program		
Power reserve	–	3 days, full power reserve approx. 3 days after connection to operating voltage	
Switching capacity at 250 V AC, cos φ = 1	10 A		
Switching capacity at 250 V AC, cos φ = 0,6	2 A		
Shortest switching times	20 min, 2 h		
Programmable every	5 min, 30 min		
Time accuracy at 25 °C	Synchronised with mains	≤ ± 1 s / day (quartz)	
Stand-by consumption	0,9 W	0,5 W	
Type of protection	IP 20		
Protection class	II according to EN 60 730-1		
Ambient temperature	– 10 °C ... +55 °C		

Accessories

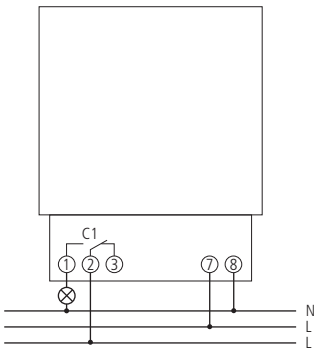


Snap-on mounting 72 x 72
↳ Art.No.: 9070071
Details page 278

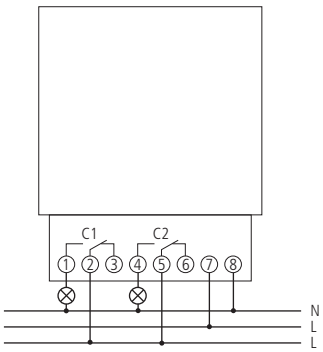
Scale drawings



Connection diagrams



SYN 269 h, SUL 289 h



SUL 289 g

Analogue time switches, Front panel installation / wall installation, tappets



TM 179 h

SUL 189 hw

Description

Common functions
- Analogue time switch
- Switching status display
- 6 tappets included in delivery

TM 179 h
- 60 minute program
- 1 channel
- Without power reserve
- Synchronised with mains
- Tappets
- Shortest switching time: 75 seconds
- Switching preselection

SUL 189 hw
- Daily/weekly program and 1/2 day OFF function for the weekdays
- 1 channel (with series connection of 2 the contacts)
- With power reserve (NiMH rechargeable battery)
- Quartz controlled
- Tappets and turning segments
- Shortest switching time: 30 minutes (12 hours for the 1/2 day OFF function)

Product selection

Program	Number of channels	Power reserve	Shortest switching times	Programmable every	Type of contact	Operating voltage	Type	Article number
60 minutes program	1	–	1,25 min	18,5 s	Changeover contact	230 V AC	TM 179 h	1790008
Daily/weekly program with 1/2 day OFF function	1	3 days	30 min, 12 h	15 min, 12 h	Changeover contact	230 V AC	SUL 189 hw	1890108

Technical data

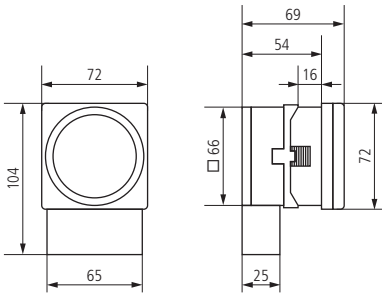
	TM 179 h	SUL 189 hw
Operating voltage	230 V AC	
Frequency	50 Hz	50–60 Hz
Installation type	Front panel installation / wall installation	
Program	60 minutes program	Daily / weekly program with 1 / 2 day OFF function
Power reserve	–	3 days, full power reserve approx. 3 days after connection to operating voltage
Switching capacity at 250 V AC, cos φ = 1	10 A	
Switching capacity at 250 V AC, cos φ = 0,6	2 A	
Shortest switching times	1,25 min	30 min, 12 h
Programmable every	18,5 s	15 min, 12 h
Time accuracy at 25 °C	Synchronised with mains	≤ ± 1 s / day (quartz)
Stand-by consumption	0,9 W	0,5 W
Test approval		
Type of protection	IP 20	
Protection class	II according to EN 60 730-1	
Ambient temperature	–10 °C ... +55 °C	

Accessories

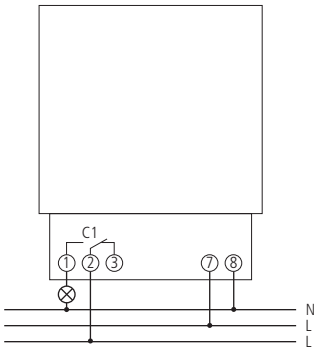


Snap-on mounting 72 x 72
↳ Art.No.: 9070071
Details page 278

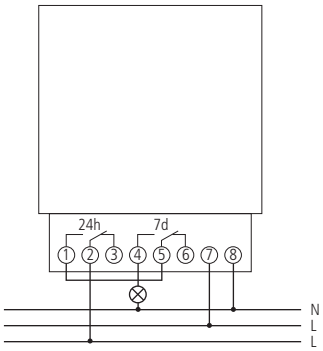
Scale drawings



Connection diagrams



TM 179 h



SUL 189 hw

Analogue time switches, Wall installation / 3-point mounting



SUL 285 / 2 T

Description

- Analogue tariff time switch with daily program
- 2 channels
- With power reserve (exchangeable NiMH rechargeable battery)
- Quartz controlled
- Tappets
- Shortest switching time: 20 minutes
- Clock hands for time display
- Switching status display
- Simple summer / winter time correction
- Control LED for battery change
- 32 tappets included in delivery

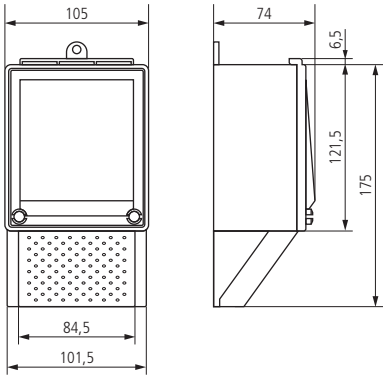
Product selection

Program	Number of channels	Power reserve	Shortest switching times	Programmable every	Type of contact	Operating voltage	Type	Article number
Daily program	2	6 days	20 min	5 min	Changeover contact	110–230 V AC	SUL 285 / 2 T	2850033

Technical data

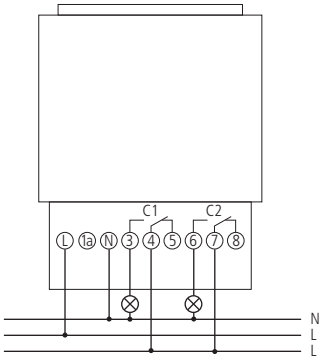
SUL 285 / 2 T			
Operating voltage	110–230 V AC	Shortest switching times	20 min
Frequency	50–60 Hz	Programmable every	5 min
Installation type	Wall installation / 3-point mounting	Time accuracy at 25 °C	≤ ± 1 s / day (quartz)
Program	Daily program	Stand-by consumption	0,6 W
Power reserve	6 days, full power reserve approx. 3 days after connection to operating voltage	Type of protection	IP 54
Switching capacity at 250 V AC, cos φ = 1	6 A	Protection class	II according to EN 62 054-21
Switching capacity at 250 V AC, cos φ = 0,6	2 A	Ambient temperature	–10 °C ... +55 °C

Scale drawings



SUL 285 / 2 T

Connection diagrams



SUL 285 / 2 T



Description

Common functions
- Analogue plug-in timer
- 1 channel
- Without power reserve
- Synchronised with mains
- Use with earthed sockets
- Switching preselection
- Switching status display

theben-timer 26
- Daily program
- 96 switching segments
- Shortest switching time: 15 minutes

theben-timer 26 IP 44

As theben-timer 26, but:
- Waterproof protection for damp locations and outdoor areas
- Transparent cover

theben-timer 27
- Weekly program
- 84 switching segments
- Shortest switching time: 2 hours

* According to guarantee conditions, see www.theben.de/en/guarantee

Product selection

Program	Shortest switching times	Programmable every	Type of contact	Operating voltage	Type	Article number
Daily program	15 min	15 min	NO contact	230 V AC	theben-timer 26	0260030
				230 V AC	theben-timer 26 IP 44	0260855
Weekly program	2 h	2 h	NO contact	230 V AC	theben-timer 27	0270930

Technical data

	theben-timer 26	theben-timer 26 IP 44	theben-timer 27
Operating voltage	230 V AC		
Frequency	50 Hz		
Installation type	Plug-in		
Program	Daily program		Weekly program
Switching capacity at 250 V AC, cos φ = 1	16 A		
Switching capacity at 250 V AC, cos φ = 0,6	4 A		
Shortest switching times	15 min		2 h
Programmable every	15 min		2 h
Time accuracy at 25 °C	Synchronised with mains		
Stand-by consumption	0,9 W		
Test approval		–	
Type of protection	IP 20	IP 44	IP 20
Protection class	II according to EN 60 730-1		
Ambient temperature	–40 °C ... +55 °C		

Analogue time switches, Surface-mounted,Drive with quick fastening for DIN rail



FRI 77 g



FRI 77 g-2

Description

Common functions
- Analogue cooling time switch with daily and short time program
- Tappet
- 2 separate switching discs

FRI 77 g
- 2 channels
- Wall-mounted
- 8 tappets included in delivery
- Optional delayed switching on of fan

FRI 77 h-2
- 1 channel
- Drive with quick fastening for DIN rail
- 6 tappets included in delivery

FRI 77 g-2
- 2 channels
- Drive with quick fastening for DIN rail
- 8 tappets included in delivery
- Optional delayed switching on of fan

Product selection

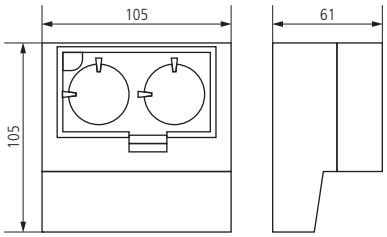
Type of contact	Installation type	Shortest switching times	Programmable every	Operating voltage	Type	Article number
Changeover contact	Surface-mounted	2 min, 1 h	1 min, 1 h	230 V AC	FRI 77 g	0770033
	Drive with quick fastening for DIN rail	2 min, 1 h	1 min, 1 h	230 V AC	FRI 77 h-2	0770802
					FRI 77 g-2	0770832

Analogue time switches, Surface-mounted,Drive with quick fastening for DIN rail

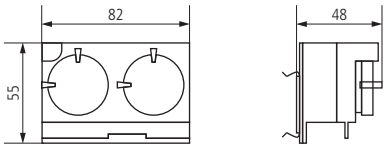
Technical data

	FRI 77 g	FRI 77 h-2	FRI 77 g-2
Operating voltage	230 V AC		
Frequency	50 Hz		
Installation type	Surface-mounted	Drive with quick fastening for DIN rail	
Program	Daily and defrost program		
Switching capacity at 250 V AC, cos φ = 1	16 A		
Switching capacity at 250 V AC, cos φ = 0,6	2,5 A		
Shortest switching times	2 min, 1 h		
Programmable every	1 min, 1 h		
Time accuracy at 25 °C	Synchronised with mains		
Stand-by consumption	0,9 W		
Type of protection	IP 20	IP 00	
Protection class	II according to EN 60 730-1		
Ambient temperature	–10 °C ... +50 °C		

Scale drawings

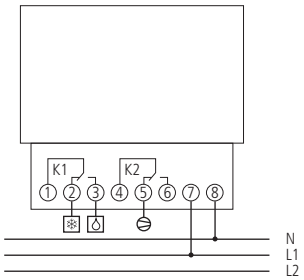


FRI 77 g

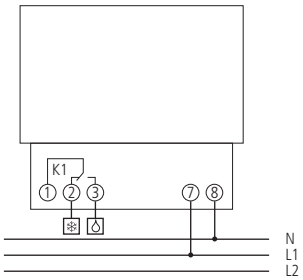


FRI 77 h-2, FRI 77 g-2

Connection diagrams



FRI 77 g, FRI 77 g-2



FRI 77 h-2



Precise in effect

Precision is a value in itself. It defines itself via what you want to achieve. Theben is always aiming to increase its efficiency. So that more can be achieved with less energy being used. Saving energy for one thing, boosting comfort another. The better we achieve both, the higher our efficiency.

	Description	Type	Page
Time relays			
	Multi-function relay	TM 345 M	58
	Time relay with switch function	TM 345 B	58

	Installation type	Size front plate	Type	Page
Hour counters, analogue				
	Front panel installation	48 x 48 mm	BZ 142-1	60
			BZ 142-3	60
		52 x 52 mm	BZ 143-1	60
	DIN rail	35 x 45 mm	BZ 145	60
Hour counters, digital				
	Front panel installation	24 x 48 mm	BZ 146	62
		48 x 48 mm	BZ 147	62
	DIN rail	35 x 45 mm	BZ 148	62



TM 345 M



TM 345 B

Description

Common functions

- Electronic time relay
- Can be used universally for controlling automatic processes in machines, lighting, ventilation, heating, cupboards etc.
- Precise analogue time setting
- Multi-voltage input for all supply and control voltages, no jumpers or additional terminals are required
- LED to display the switching status

TM 345 M

- Locking snap switch to select the period of time, as well as the following operating modes:
- Response delay (AV), without control contact
- Wipe contact (EW), without control contact
- Release delay (RV), with control contact
- Pulse former (IF), with control contact
- Response and release delay (VZ), with control contact
- Pulse output (WR), with control contact
- Flip-flop (TG)

TM 345 B

- With flip-flop function
- Pulse and break time independently adjustable

Product selection

Multi-function	Type	Article number
√	TM 345 M	3450731
–	TM 345 B	3450730

Technical data

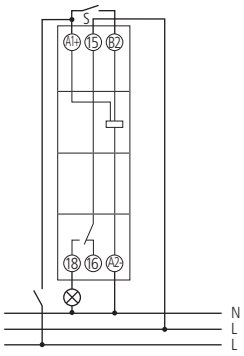
	TM 345 M	TM 345 B
Operating voltage	12–240 V AC/DC	24–240 V AC/24 V DC
Frequency	50–60 Hz	
Width	1 module	
Stand-by consumption	1 W	
Type of contact	Changeover contact	
Housing and insulation material	High-temperature resistant, self-extinguishing thermoplastic	
Switching capacity at 250 V AC, cos φ = 1	8 A	
Switching output	Potential-free	
Nominal current	10 mA–20 A < 10 ms	
Electrical service life	10^5 operating cycles	
Fall back value of nominal input voltage	< 10.2 V AC/DC (as per EN 61812-1)	< 20.4 V AC/DC (as per EN 61812-1)
Type of protection	IP 20	
Protection class	II	
Ambient temperature	–20 °C ... +60 °C	

Accessories

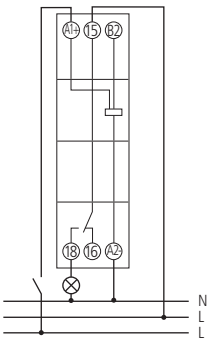
Wall mounting kit 17,5 mm
↳ Art.No.: 9070065
Details page 278



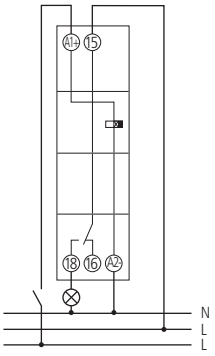
Connection diagrams



TM 345 M

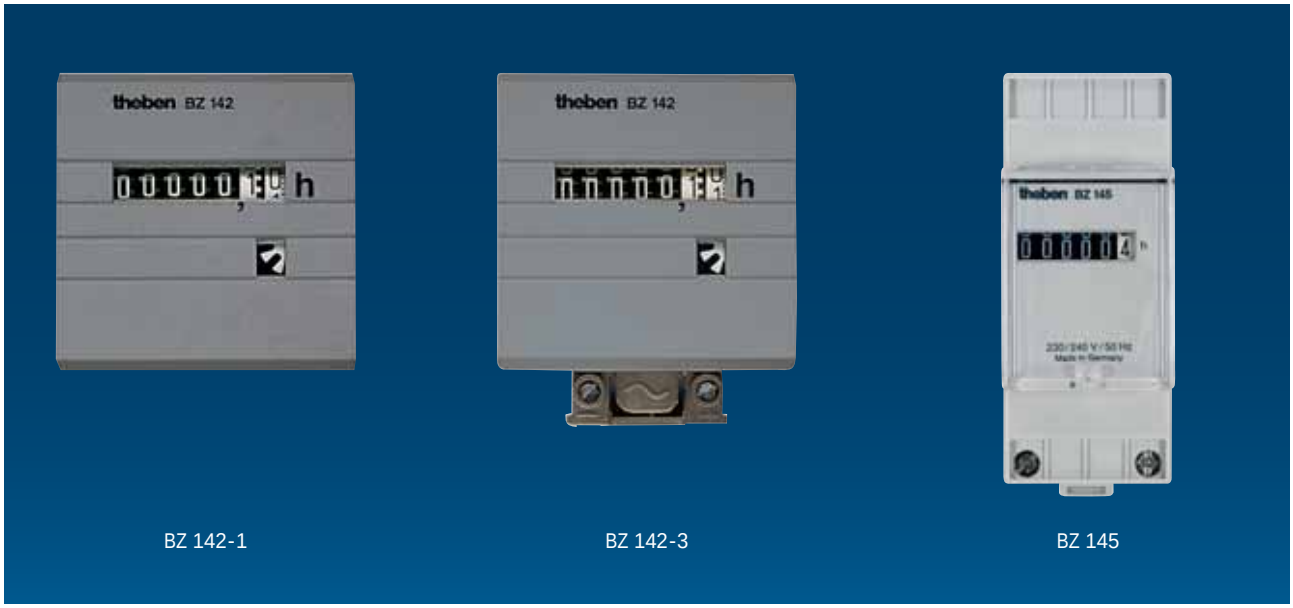


TM 345 M



TM 345 B

Hour counters, analogue, front panel and DIN rail



BZ 142-1 BZ 142-3 BZ 145

Description

Common functions

- Hour counter with synchronous motor drive

BZ 142-1

- Front panel devices with click-in or stretch clamp supports for walls up to a maximum of 10 mm thick
- Clamp or flat plug connection 6.3 mm
- Versions for direct voltage with quartz-controlled stepper motor
- Progress display

BZ 142-3

- With plug-in base for wall installation (terminal cover required)
- Plug-in base with quick fastening for 35 mm profile rails (DIN EN 60 715)
- Screw terminals
- Contact protection to comply with accident prevention regulation BGV A3
- Housing colour: anthracite
- Versions for direct voltage with quartz-controlled stepper motor
- Progress display

BZ 143-1

As BZ 142-1

BZ 145

- Built in distributor device with quick fastening for 35 mm profile rails (DIN EN 60 715)
- Top mounting with additional terminal box cover plate, sealable
- Control panel installation with assembly kit No. 907 0 001
- Contact protection to comply with accident prevention regulation BGV A3
- Captive screw terminals

Product selection

Counting range	Installation type	Size front plate	Size of Installation section	Operating voltage	Type	Article number
99 999,99 hours without reset	Front panel installation	48 x 48 mm	46 x 46 mm	230 V AC	BZ 142-1	1420721
				10–80 V DC	BZ 142-1 10V	1420821
				230–240 V AC	BZ 142-1 230V	1420621
				24 V AC	BZ 142-1 24V	1424721
				230 V AC	BZ 142-3	1420723
				10–80 V DC	BZ 142-3 10V	1420823
		52 x 52 mm	46 x 46 mm or ø 50 mm	230 V AC	BZ 143-1	1430721
99 999,9 hours without reset	DIN rail	35 x 45 mm	35 x 45 mm (depth 60 mm)	230 V AC	BZ 145	1450000
				24–48 V DC	BZ 145 24V	1459024

Technical data

	BZ 142-1	BZ 142-1 10V	BZ 142-1 230V	BZ 142-1 24V	BZ 142-3	BZ 142-3 10V	BZ 143-1	BZ 145	BZ 145 24V
Operating voltage	230 V AC	10–80 V DC	230–240 V AC	24 V AC	230 V AC	10–80 V DC	230 V AC	230 V AC	24–48 V DC
Frequency	50 Hz	–	60 Hz	50 Hz		–	50 Hz		–
Width	–							2 modules	
Installation type	Front panel installation							DIN rail	
Counting range	99 999,99 hours without reset							99 999,9 hours without reset	
Type of protection	IP 65 (Front frame)							IP 20	
Protection class	II according to EN 60 335-1								
Ambient temperature	–20 °C ... +70 °C							–10 °C ... +70 °C	

Accessories



Clamp BZ
for BZ 142-1, BZ 143-1
↳ Art.No.: 9070043
Details page 280



Cover 55 x 55 for BZ
for BZ 142-1
↳ Art.No.: 9070041
Details page 280



Cover 72 x 72 for BZ
for BZ 142-1
↳ Art.No.: 9070074
Details page 280



Plug-in socket BZ
for BZ 142-3
↳ Art.No.: 9070042
Details page 280

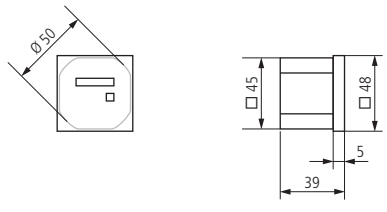


Front kit BZ 142-3
for BZ 142-3
↳ Art.No.: 9070075
Details page 280

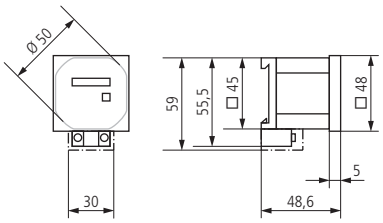


Wall mounting kit 35 mm
for BZ 145
↳ Art.No.: 9070064
Details page 278

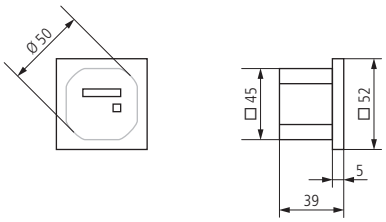
Scale drawings



BZ 142-1

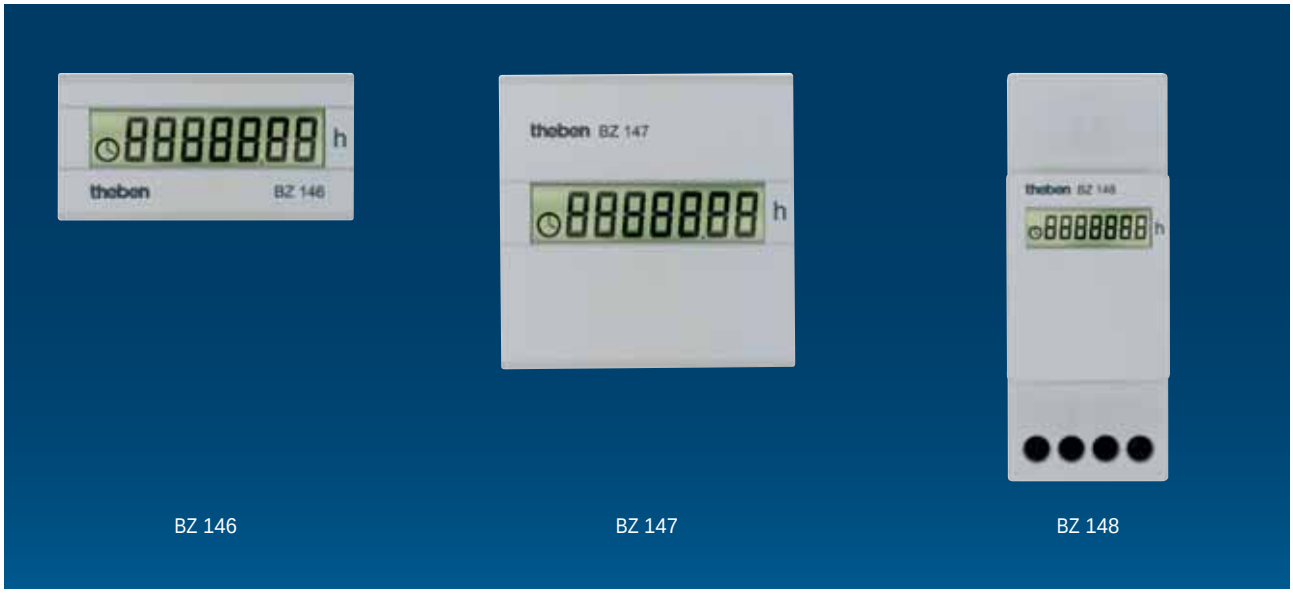


BZ 142-3



BZ 143-1

Hour counters, digital, front panel and DIN rail



BZ 146 BZ 147 BZ 148

Description

Common functions

- Digital hour counter
- With EEPROM memory provides reliable operating data capture even with loss of power
- 7-digit high-contrast LCD display
- Onscreen progress display

BZ 146

- Installation cutout 22 mm x 45 mm
- Control panel installation
- Screw terminals
- Tension clamp brackets for walls up to 5mm thick
- Quartz controlled version

BZ 147

- Installation cutout 45 mm x 45 mm
- Control panel installation
- Screw terminals
- Tension clamp brackets for walls up to 5mm thick
- Quartz controlled version

BZ 148

- For DIN rail mounting with quick fastening for 35 mm profile rails (DIN EN 60 715)
- Surface mounting with additional terminal box cover plate option
- Captive screw terminals

Product selection

Counting range	Installation type	Size front plate	Size of Installation section	Operating voltage	Type	Article number
99 999,99 hours without reset	Front panel installation	24 x 48 mm	22 x 45 mm	110–240 V AC	BZ 146	1460000
		48 x 48 mm	45 x 45 mm	110–240 V AC	BZ 147	1470000
999 999.9 hours without reset	DIN rail	35 x 45 mm	35 x 45 mm (depth 60 mm)	24–240 V AC/12–150 V DC	BZ 148	1480000

Technical data

	BZ 146	BZ 147	BZ 148
Operating voltage	110 – 240 V AC		24 – 240 V AC / 12 – 150 V DC
Frequency	50 – 60 Hz		
Width	–		2 modules
Installation type	Front panel installation		DIN rail
Counting range	99 999,99 hours without reset		999 999.9 hours without reset
Type of protection	IP 65		IP 20
Protection class	II according to EN 61010		
Ambient temperature	– 30 °C ... +70 °C		– 10 °C ... +70 °C

Accessories

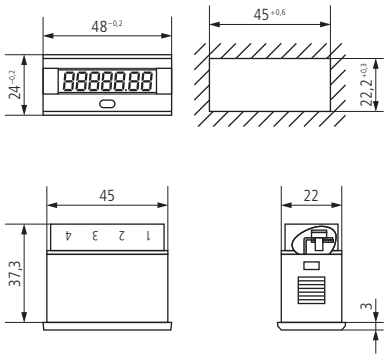


Clamp BZ
for BZ 146, BZ 147
↳ Art.No.: 9070043
Details page 280

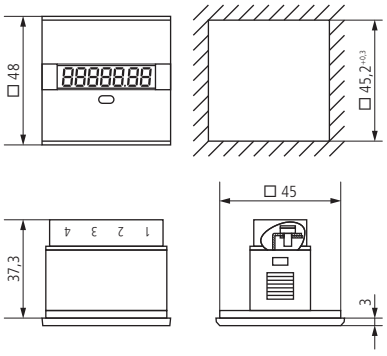


Wall mounting kit 35 mm
for BZ 148
↳ Art.No.: 9070064
Details page 278

Scale drawings

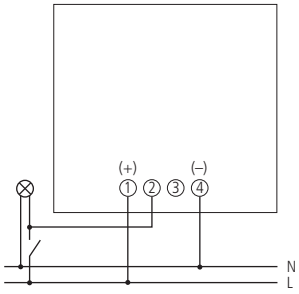


BZ 146

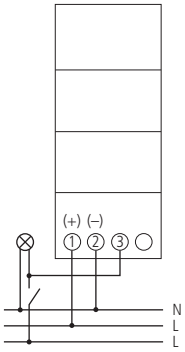


BZ 147

Connection diagrams



BZ 146, BZ 147



BZ 148



Everything in view

When Paul Schwenk developed the first staircase time switch in 1921, it was due to his special kind of attentiveness. He noticed that the staircase light never switched off so lots of energy was being wasted. What then may have been no more than an expression of his frugality is now in demand worldwide as a consequence of climate change: using energy sensibly. Theben has been making a contribution to that for a long time now and not just with staircase light time switches. We call that attentiveness.

	Setting range time	Key input	Multi-voltage input	Switch-off pre-warning	Long-time function	Zero-cross switching	Without stand-by consumption	Type	Page
DIN rail, electronic with multi-function									
	0,5 – 20 min	150 mA	√	√	60 min	√	–	ELPA 1	66
			–	√	60 min	√	–	ELPA 6	66
								ELPA 6 plus	66
DIN rail, Electronic									
	0,5 – 20 min	150 mA	√	–	–	–	–	ELPA 3	66
			–	–	–	–	–	ELPA 7	66
DIN rail, Electro-mechanical									
	1 – 7 min	50 mA	–	–	–	–	√	ELPA 8	68
								ELPA 9	68
Flush-mounted, electronic with multi-function									
	0,5 – 20 min	30 mA	√	√	60 min	√	–	ELPA 041	70
Flush-mounted, electronic									
	0,5 – 20 min	30 mA	–	–	–	√	–	ELPA 047	70

	Universal dimmer for R, L, and C loads	Dimming output	Multivoltage input	Automatic overload and overheating switch-off	Soft-ON / Soft-OFF	Saveable switch-on brightness	Comfort functions	Type	Page
Dimmer									
	√	√	√	√	√	√	–	DIMAX 532 plus	72
							√	DIMAX 534 plus	72

5

Staircase time switches, DIN rail, electronic



ELPA 1



ELPA 6 plus



ELPA 3

Description

Common functions

- Staircase time switch, electronical
- Terminal layout same as ELPA 8
- Extremely accurate
- Push button input with electronic overload protection
- Automatic 3 or 4 conductor detection (4 conductor with connection for floor lighting, 3 conductor no longer permitted for new systems)

ELPA 1

- Zero-cross switching for relay-saving switching and high lamp loads
- Multi-functional device with 10 available functions, set at the front of the device
- Additional multi-voltage input electrically isolated for AC/DC 8...240 V, e.g. für intercoms
- Switch-off pre-warning (two double flashes) in accordance with DIN 18015-2 to avoid sudden darkness
- Extended function activated via long button press
- Immediate secondary switching (stair light switch) or prematurely switched off (pulse switch with switch-off delay)
- Permanent switch
- Electronic pulse light

ELPA 6

- Zero-cross switching for relay-saving switching and high lamp loads
- Multi-functional device with 10 available functions, set at the front of the device
- Switch-off pre-warning (two double flashes) in accordance with DIN 18015-2 to avoid sudden darkness
- Extended function activated via long button press
- Immediate secondary switching (stair light switch) or prematurely switched off (pulse switch with switch-off delay)
- Permanent switch
- Electronic pulse light

ELPA 6 plus

As ELPA 6, but:

- Optimized for switching LED
- Switch-off pre-warning optimized for LED lamps (two single flashes)
- Extended blinking pulse

ELPA 3

- Additional multi-voltage input electrically isolated for AC/DC 8...240 V, e.g. für intercoms
- Immediate secondary switching
- Toggle switch for permanent light

ELPA 7

As ELPA 3, but:

- Without multi-voltage input

Product selection

Incandescent lamp load	Multi-function	Multi-voltage input	Switch-off pre-warning	Zero-cross switching	Type	Article number
3600 W	√	√	√	√	ELPA 1	0010002
		–	√	√	ELPA 6	0060002
					ELPA 6 plus	0060003
2300 W	–	√	–	–	ELPA 3	0030002
		–	–	–	ELPA 7	0070002

Technical data

	ELPA 1	ELPA 6	ELPA 6 plus	ELPA 3	ELPA 7
Operating voltage	220–240 V AC				
Frequency	50–60 Hz				
Stand-by consumption	0,9 W			0,7 W	
Glow lamp load	150 mA				
Setting range time	0,5–20 min				
3/4-way conductors	Automatic				
Type of contact	NO contact				
Switching output	Not potential-free (230 V)				
Incandescent/halogen lamp load	3600 W			2300 W	
Fluorescent lamp load (conventional) lead-lag circuit	3600 VA			2300 VA	
Fluorescent lamp load (conventional) parallel-corrected	1200 VA, 120 µF			400 VA, 42 µF	
Energy saving lamps	250 W			90 W	
LED lamp < 2 W	55 W			20 W	
LED lamp 2–8 W	150 W			55 W	
LED lamp > 8 W	180 W			70 W	
Fluorescent lamp load (electronic ballast)	1000 W			350 W	
Switching capacity	16 AX (at 230 V AC, cos φ = 0.3), 16 A (at 230 V AC, cos φ = 1)			10 AX (at 230 V AC, cos φ = 0.3), 16 A (at 230 V AC, cos φ = 1)	
Test approval					
Ambient temperature	–25 °C ... +50 °C				
Protection class	II				
Type of protection	IP 20				

Accessories

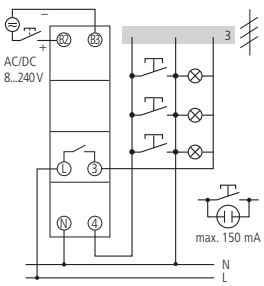


Wall mounting kit 17,5 mm
↳ Art.No.: 9070065
Details page 278

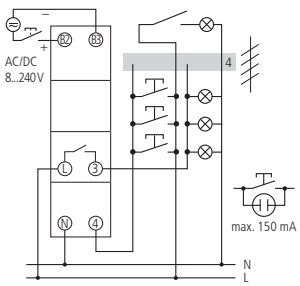


Front panel kit
↳ Art.No.: 9070001
Details page 278

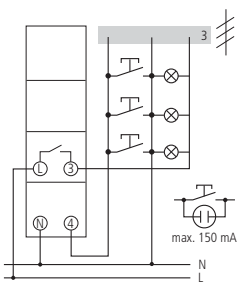
Connection diagrams



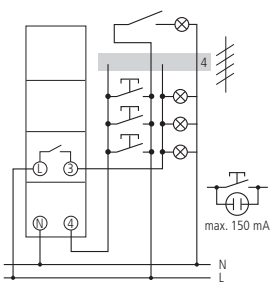
ELPA 1, ELPA 3



ELPA 1, ELPA 3



ELPA 6, ELPA 6 plus, ELPA 7



ELPA 6, ELPA 6 plus, ELPA 7

Time and light control

Staircase time switches, DIN rail, Electro-mechanical



ELPA 8 ELPA 9

Description

Common functions

- Staircase time switch, electro-mechcanical
- No closed-circuit current consumption
- Toggle switch for permanent light ON
- Reliable due to synchronous motor drive
- Simplest possible time setting and direct delay time readout on absolute scale
- Precision mechanics and therefore exact switching period
- Very low sensitivity to interference

ELPA 8

- 4 conductor with floor lighting connection
- 3 conductor without floor lighting (no longer permitted for new systems)
- Retriggerable

ELPA 9

- 3 conductor connection and floor lighting, but without secondary switching (no longer permitted for new systems)
- Terminal layout same as ELPA 8

* According to guarantee conditions, see www.theben.de/en/guarantee

Product selection

Incandescent lamp load	Setting range time	Without stand-by consumption	Switch-off pre-warning	3/4-way conductors	Secondary switching	Type	Article number
2300 W	1 – 7 min	√	–	Yes	After 30 s	ELPA 8	0080002
				Only 3-way conductor	No	ELPA 9	0090001

Additional technical data at: www.theben.de/product/ Articlenumber

Technical data

	ELPA 8	ELPA 9
Operating voltage	230 V AC	
Frequency	50 Hz	
Stand-by consumption	0 W	
Glow lamp load	50 mA	
Setting range time	1 – 7 min	
3/4-way conductors	Yes	Only 3-way conductor
Type of contact	NO contact	
Switching output	Not potential-free (230 V)	
Incandescent/halogen lamp load	2300 W	
Fluorescent lamp load (conventional) lead-lag circuit	2300 VA	
Fluorescent lamp load (conventional) parallel-corrected	1300 VA, 70 µF	
Energy saving lamps	150 W	
LED lamp < 2 W	30 W	
LED lamp 2 – 8 W	90 W	
LED lamp > 8 W	100 W	
Fluorescent lamp load (electronic ballast)	600 W	
Switching capacity	6 AX (at 230 V AC, cos φ = 0.3), 16 A (at 230 V AC, cos φ = 1)	
Test approval		–
Ambient temperature	–10 °C ... +50 °C	
Protection class	II	
Type of protection	IP 20	

Accessories

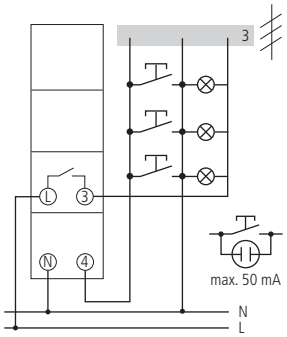


Wall mounting kit 17,5 mm
↳ Art.No.: 9070065
Details page 278

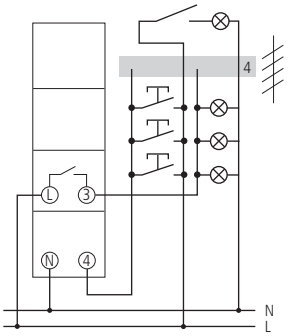


Front panel kit
↳ Art.No.: 9070001
Details page 278

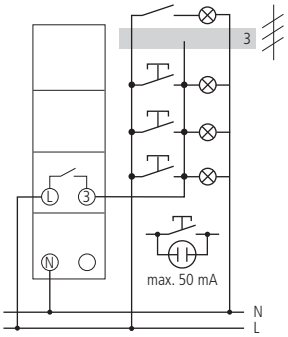
Connection diagrams



ELPA 8



ELPA 8



ELPA 9

Staircase time switches, Flush-mounted, electronic



ELPA 041 ELPA 047

Description

Common functions

- Flush-mounted staircase time switch, electronic
- Suitable for upgrades and new installation
- Zero-cross switching for relay-saving switching and high lamp loads
- Push button input with electronic overload protection
- Automatic 3 or 4 conductor detection (4 conductor with connection for floor lighting, 3 conductor no longer permitted for new systems)
- Extremely accurate
- Immediate secondary switching

ELPA 041

- Multi-functional device with 12 available functions, set at the front of the device
- Switch or push button connectable, i.e. existing switches can be used (e.g. when updating)
- Additional multi-voltage input electrically isolated for AC/DC 8...240 V, e.g. für intercoms
- Switch-off pre-warning (two double flashes) in accordance with DIN 18015-2 to avoid sudden darkness
- 60 min. extended function activated via long button press
- Immediate secondary switching (stair light switch) or prematurely switched off (pulse switch with switch-off delay)
- Can be connected via key or switch

ELPA 047

- Push button connectable

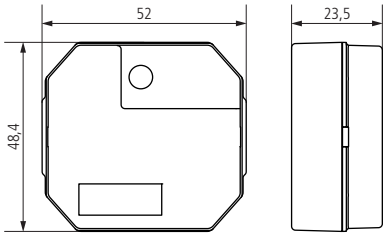
Product selection

Incandescent lamp load	Multi-function	Multi-voltage input	Switch-off pre-warning	Zero-cross switching	Type	Article number
1800 W	√	√	√	√	ELPA 041	0410002
	–	–	–	√	ELPA 047	0470002

Technical data

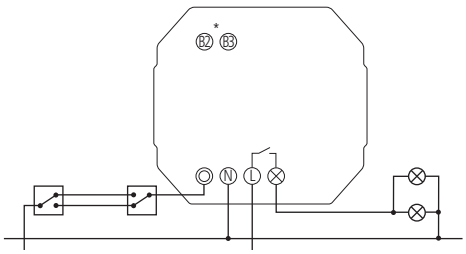
	ELPA 041	ELPA 047
Operating voltage	230 V AC	
Frequency	50 – 60 Hz	
Stand-by consumption	0,1 W	
Glow lamp load	30 mA	
Setting range time	0,5 – 20 min	
3/4-way conductors	Automatic	
Type of contact	NO contact	
Switching output	Not potential-free (230 V)	
Incandescent/halogen lamp load	1800 W	
Fluorescent lamp load (conventional) lead-lag circuit	1200 VA	
Fluorescent lamp load (conventional) parallel-corrected	580 VA, 54 µF	
Energy saving lamps	110 W	
LED lamp < 2 W	20 W	
LED lamp 2 – 8 W	70 W	
LED lamp > 8 W	110 W	
Switching capacity	6 AX (at 230 V AC, cos φ = 0.3), 10 A (at 230 V AC, cos φ = 1)	
Test approval		
Ambient temperature	– 25 °C ... +45 °C	
Protection class	II	
Type of protection	IP 20	

Scale drawings



ELPA 041, ELPA 047

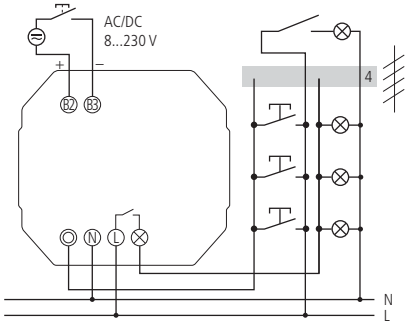
Connection diagram



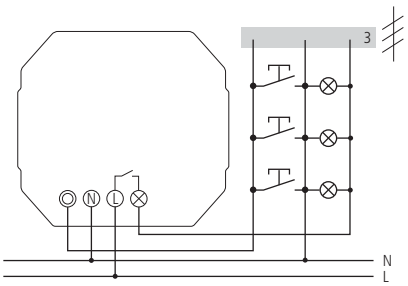
ELPA 041

* with switch (cannot be used with three way switch, multi-voltage input switch connection)

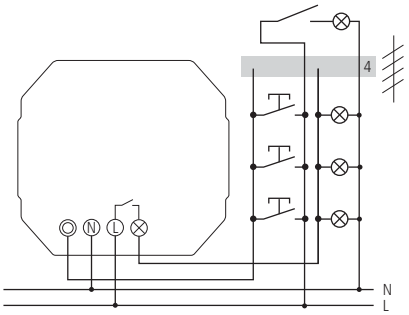
Connection diagrams



ELPA 041



ELPA 047



ELPA 047

Dimmer



DIMAX 532 plus



DIMAX 534 plus

Description

Common functions

- Universal dimmer for R, L and C loads with automatic load detection
- 400 W dimming output, 80 W dimmable energy saving lamps (ESL), 60 W dimmable LED
- Switch-on brightness can be saved individually
- Adjustable minimum brightness (required for ESL and LED)
- Multi-voltage input, e.g. for intercoms
- Low stand-by consumption
- Memory function in the event of power failure
- Automatic electronic overload and overheating switch-off
- Dimming switch-on function
- Permanent ON function (test function)
- Soft ON and Soft OFF protects the light
- The dimming output can be upgraded by using additional dimmboosters „DMB 1 T KNX" - dimming output 300 W/VA for each dimmbooster

DIMAX 534 plus

- Comfort setting with wake-up and snooze function (can be deactivated), e.g. for children's bedrooms
- Adjustable dimming rate (with automatic functions)
- One and two button operation for ease of use
- Up to 3 light scenes can be called up via separate input (diode module required for more than one light scene)
- Central OFF/ON or light scene for up to 10 devices possible with one push button
- Staircase light function with dimming function in accordance with DIN 18015-2 (resettable, long-time function)
- Can be controlled by push buttons or switches e.g. for combination with presence detectors or time switch

Product selection

Load detection	Optimized for energy-saving lamps	Light settings	Multi-function	Type	Article number
√	√	–	–	DIMAX 532 plus	5320001
		√	√	DIMAX 534 plus	5340001

Technical data

	DIMAX 532 plus	DIMAX 534 plus
Operating voltage	230 V AC	
Frequency	50 Hz	
Stand-by consumption	0,2 W	
Incandescent / halogen lamp load	400 W	
LED lamp	Trailing edge: 400 W	
Transformer electronic (C)	300 W	
Transformer inductive (L)	400 W	
Energy saving lamps	Trailing edge: 400 W	
Ambient temperature	–30 °C ... +50 °C	
Protection class	II	
Type of protection	IP 20	

Accessories



Wall mounting kit 17,5 mm
↳ Art.No.: 9070065
Details page 278

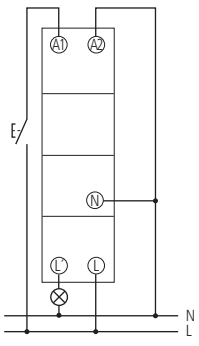


Front panel kit
↳ Art.No.: 9070001
Details page 278

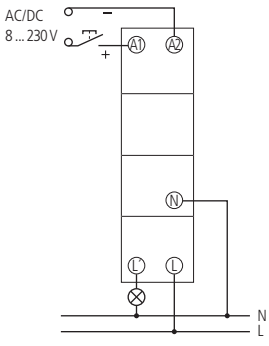


Diode module
for DIMAX 534 plus
↳ Art.No.: 9070367
Details page 286

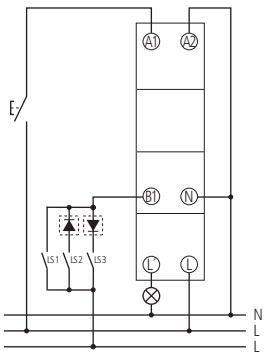
Connection diagrams



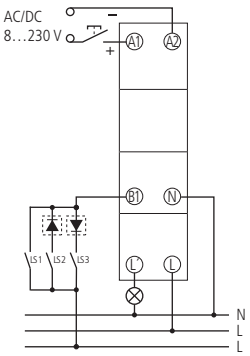
DIMAX 532 plus



DIMAX 532 plus



DIMAX 534 plus



DIMAX 534 plus



The right moment

What we don‘t consume today is still available to us tomorrow and for our children‘s generation. Often that doesn‘t mean having to do without anything. It means only using our resources when we actually need them. Theben contributes to this with a multitude of clever innovations such as twilight switches are one of these. That‘s what we mean by sustainability.

	Number of channels	Setting range brightness	Switch-on delay	Separate on/off switching delay	External inputs	PC interface	Program	Type of connection	Type	Page
Analogue, DIN rail										
	1	2 – 100 lx	20 s	–	–	–	–	Screw terminals	LUNA 108	76
		2 – 2000 lx	60 s	–	–	–	–	DuoFix spring terminals	LUNA 109	76
		2 – 50000 lx	0 – 20 min	–	–	–	–	DuoFix spring terminals	LUNA 110	76
		2 – 2000 lx	0 – 59 min	√	–	√	Weekly program	DuoFix spring terminals	LUNA 120 top2	80
Digital without clock, DIN rail										
	1	1 – 99000 lx	0 – 59 min	√	1	√	–	DuoFix spring terminals	LUNA 111 top2	78
	2	1 – 99000 lx	0 – 59 min	√	2	√	–	DuoFix spring terminals	LUNA 112 top2	78
Digital with clock, DIN rail										
	1	1 – 99000 lx	0 – 59 min	√	1	√	Weekly program	DuoFix spring terminals	LUNA 121 top2 RC	80
	2	1 – 99000 lx	0 – 59 min	√	2	√	Weekly program	DuoFix spring terminals	LUNA 122 top2 RC	80
Analogue, Wall installation or mast bracket										
	1	5 – 200 lx	40 s	–	–	–	–	Screw terminals	LUNA 126 star	82
		2 – 200 lx	2 – 100 s	–	–	–	–	Screw terminals	LUNA 127 star	82
		2 – 2000 lx	2 – 100 s	–	–	–	–	Screw terminals	LUNA 128 star	82
Digital, Wall installation or mast bracket										
	1	2 – 200 lx	0 – 10 min	√	–	–	Daily program	Screw terminals	LUNA 129 star-time	82



LUNA 108 LUNA 109 LUNA 110

Description

Common functions
- Analogue twilight switch
- External light sensor included in delivery
- Display of channel and switching status
- Infinitely adjustable switching brightness

LUNA 108
- Fixed On and Off switching delay

LUNA 109
- DuoFix spring terminals
- Fixed On and Off switching delay
- Test function

LUNA 110
- Adjustable On and Off switching delay
- DuoFix spring terminals
- Extended brightness levels and adjustable delay
- Five adjustable brightness levels for simple setting of lux value
- Zero-cross switching for relay-saving switching and high lamp loads (not with 24 V devices)
- Permanent OFF and permanent ON function can be set on the potentiometer
- Test function

Product selection

Setting range brightness	Switch-on delay	Type of connection	Operating voltage	Sensor (included)	Type of protection	Type	Article number
2–100 lx	20 s	Screw terminals	220–240 V AC	Surface-mounted light sensor	IP 20, sensor IP 54	LUNA 108 AL	1080710
				Flush-mounted light sensor	IP 20, sensor IP 65	LUNA 108 EL	1080700
2–2000 lx	60 s	DuoFix spring terminals	220–240 V AC	Surface-mounted light sensor	IP 20, sensor IP 55	LUNA 109 AL	1090100
				Flush-mounted light sensor	IP 20, sensor IP 65	LUNA 109 EL	1090200
2–50000 lx	0–20 min	DuoFix spring terminals	220–240 V AC	Surface-mounted light sensor	IP 20, sensor IP 55	LUNA 110 AL	1100100
				Flush-mounted light sensor	IP 20, sensor IP 65	LUNA 110 EL	1100200
			12–24 V UC	Surface-mounted light sensor	IP 20, sensor IP 55	LUNA 110 AL 24V	1104100
				Flush-mounted light sensor	IP 20, sensor IP 65	LUNA 110 EL 24V	1104200

Additional technical data at: www.theben.de/product/ Articlenumber

Technical data

	LUNA 108	LUNA 109	LUNA 110	LUNA 110 24V
Operating voltage	220–240 V AC			12–24 V UC
Frequency	50–60 Hz			
Stand-by consumption	0,8 W	1,1 W	1,3 W	0,2 W
Setting range brightness	2–100 lx	2–2000 lx	2–50000 lx	
Switch-on delay	20 s	60 s	0–20 min	
Type of contact	NO contact	Changeover contact		
Switching output	Potential-free		Potential-free, not for SELV	Potential-free
Width	1 module	2 modules		
Switching capacity	16 A (at 250 V AC, cos φ = 1), 10 AX (Fluorescent lamp load)		16 A (at 250 V AC, cos φ = 1), 16 AX (Fluorescent lamp load)	16 A (at 250 V AC, cos φ = 1), 2 AX (Fluorescent lamp load)
Switching capacity min.	–	<10 mA		
Incandescent lamp load	2300 W		3600 W	1400 W
Fluorescent lamp load (conventional) not corrected, series-corrected, lead-lag circuit	2300 VA		3600 VA	1400 VA
Fluorescent lamp load (conventional) parallel-corrected	400 VA, 42 µF		1200 VA, 130 µF	58 W, 7 µF
LED lamp < 2 W	20 W		50 W	6 W
LED lamp 2–8 W	55 W		160 W	20 W
LED lamp > 8 W	70 W		200 W	24 W
Energy saving lamps	90 W		270 W	45 W
Fluorescent lamp load (electronic ballast)	300 W		1000 W	120 W
Test approval				–
Ambient temperature	–25 °C ... +50 °C	–30 °C ... +55 °C		
Protection class	II	II, Sensor III		
Max. cable length to sensor	25 m	100 m		

Accessories



Wall mounting kit 17,5 mm
for LUNA 108
↳ Art.No.: 9070065
Details page 278



Wall mounting kit 35 mm
for LUNA 109, LUNA 110
↳ Art.No.: 9070064
Details page 278



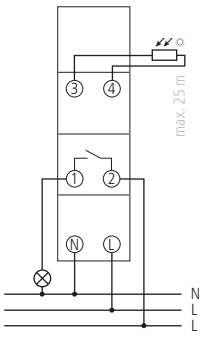
Front panel kit
↳ Art.No.: 9070001
Details page 278

Surface-mounted light sensor
Details page 285

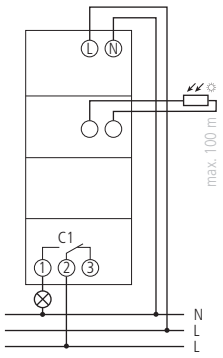
Analogue surface-mounted light sensor
Details page 285

Analogue flush-mounted light sensor
Details page 285

Connection diagrams



LUNA 108



LUNA 109, LUNA 110

Twilight switches, Digital without clock, DIN rail



LUNA 111 top2

LUNA 112 top2

Description

Common functions

- Light level controller
- External light sensor included in delivery
- Switching brightness digitally adjustable
- Adjustable On and Off switching delay
- Switching brightness and switching delay can be set separately for switching On and Off
- Onscreen display of channel and switching status as well as current lux value
- DuoFix spring terminals
- Zero-cross switching for relay-saving switching and high lamp loads (not with 24 V devices)
- Up to 4 sensors can be attached
- Up to 10 devices can be connected to a digital sensor
- Interface for OBELISK top2 memory card (PC programming)
- External light sensor included in delivery
- Extended brightness range
- Permanent switching ON/OFF
- Test function
- Switching preselection
- Display back light (can be turned off)
- External input
- Operating hour counter

LUNA 111 top2

- 1 channel

LUNA 112 top2

- 2 channels
- 2 external contol inputs
- Channel-independent operating hour counter

Product selection

Number of channels	External inputs	Switch-on delay	Sensor (included)	Type of protection	Type	Article number
1	1	0–59 min	Surface-mounted light sensor	IP 20, sensor IP 55	LUNA 111 top2 AL	1110100
			Flush-mounted light sensor	IP 20, sensor IP 66 (Front) | IP 40 (Back)	LUNA 111 top2 EL	1110200
2	2	0–59 min	Surface-mounted light sensor	IP 20, sensor IP 55	LUNA 112 top2 AL	1120100
			Flush-mounted light sensor	IP 20, sensor IP 66 (Front) | IP 40 (Back)	LUNA 112 top2 EL	1120200

Technical data

	LUNA 111 top2	LUNA 112 top2
Operating voltage	230 – 240 V AC	100 – 240 V AC
Frequency	50 – 60 Hz	
Stand-by consumption	1,7 W	1,3 W
Setting range brightness	1 – 99000 lx	
Switch-on delay	0 – 59 min	
Type of contact	Changeover contact	2 two-way changeover contacts
Switching output	Potential-free, not for SELV	
Width	2 modules	3 modules
Switching capacity	16 A (at 250 V AC, cos φ = 1), 10 A (at 250 V AC, cos φ = 0.6), 10 AX (Fluorescent lamp load)	
Switching capacity min.	Approx. 10 mA	
Incandescent lamp load	2600 W	
Fluorescent lamp load (conventional) not corrected, series-corrected, lead-lag circuit	2300 VA	
Fluorescent lamp load (conventional) parallel-corrected	800 VA, 80 µF	
LED lamp < 2 W	30 W	
LED lamp 2 – 8 W	100 W	
LED lamp > 8 W	120 W	
Energy saving lamps	170 W	
Fluorescent lamp load (electronic ballast)	650 W	
Test approval		
Ambient temperature	– 30 °C ... +55 °C	
Protection class	II, Sensor III	
Max. cable length to sensor	100 m	

Accessories



PC set OBELISK top2
↳ Art.No.: 9070409
Details page 279



Memory card OBELISK top2
↳ Art.No.: 9070404
Details page 279



Front panel kit
↳ Art.No.: 9070001
Details page 278

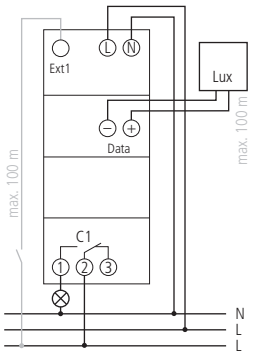
Digital surface-mounted light sensor
Details page 285

Digital flush-mounted light sensor
Details page 285

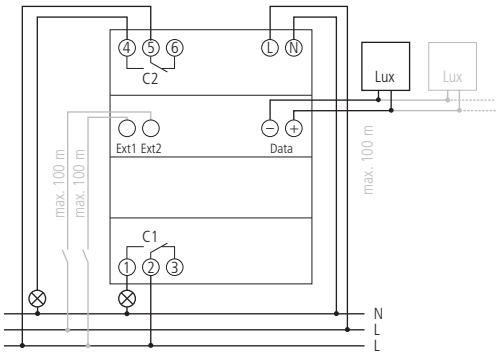
Wall mounting kit 35 mm
Details page 278

Wall mounting kit 52,5 mm
Details page 278

Connection diagrams



LUNA 111 top2



LUNA 112 top2



Description

Common functions

- Twilight switch with integrated weekly timer
- External light sensor included in delivery
- Fixed ON and OFF times (e.g. nighttime interruption)
- Different summer / winter time rules can be selected or freely defined
- Adjustable On and Off switching delay
- Switching brightness and switching delay can be set separately for switching On and Off
- DuoFix spring terminals
- Zero-cross switching for relay-saving switching and high lamp loads (not with 24 V devices)
- Interface for OBELISK top2 memory card (PC programming)
- Permanent switching ON / OFF
- Test function
- Switching preselection
- Display back light (can be turned off)
- Variable lux values can be set for each day
- Holiday and public holiday program with yearly function for fived and public holidayas dependent on Easter
- Operating hour counter

LUNA 121 top2 RC

- 1 channel
- 1 special programmes with yearly function
- DCF77 or GPS radio controlled time via external antenna
- Switching brightness digitally adjustable
- Onscreen display of channel and switching status as well as current lux value
- Up to 4 sensors can be attached
- Up to 10 devices can be connected to a digital sensor
- Extended brightness range
- External input

LUNA 122 top2 RC

- 2 channels
- 2 special programmes with yearly function
- DCF77 radio controlled via external antenna
- 2 external inputs
- Switching brightness digitally adjustable
- Onscreen display of channel and switching status as well as current lux value
- Up to 4 sensors can be attached
- Up to 10 devices can be connected to a digital sensor
- Extended brightness range
- External input

LUNA 120 top2

- Analogue adjustable switching brightness
- Onscreen display of channel and switching status
- 1 channel

Product selection

Number of channels	External inputs	Additional program	Operating voltage	Sensor (included)	Type of protection	Type	Article number
1	1	Extra / Holiday program	230 – 240 V AC	Surface-mounted light sensor	IP 20, sensor IP 55	LUNA 121 top2 RC AL	1210100
				Flush-mounted light sensor	IP 20, sensor IP 66 (Front) | IP 40 (Back)	LUNA 121 top2 RC EL	1210200
			12 – 24 V UC	Surface-mounted light sensor	IP 20, sensor IP 55	LUNA 121 top2 RC AL 24V	1214100
2	2	Extra / Holiday program	100 – 240 V AC	Surface-mounted light sensor	IP 20, sensor IP 55	LUNA 122 top2 RC AL	1220100
				Flush-mounted light sensor	IP 20, sensor IP 66 (Front) | IP 40 (Back)	LUNA 122 top2 RC EL	1220200
1	–	Holiday program	220 – 240 V AC	Surface-mounted light sensor	IP 20, sensor IP 55	LUNA 120 top2 AL	1200100
				Flush-mounted light sensor	IP 20, sensor IP 65	LUNA 120 top2 EL	1200200

Additional technical data at: www.theben.de / product / Articlenumber

Technical data

	LUNA 121 top2 RC	LUNA 121 top2 RC 24V	LUNA 122 top2 RC	LUNA 120 top2
Operating voltage	230 – 240 V AC	12 – 24 V UC	100 – 240 V AC	220 – 240 V AC
Frequency	50 – 60 Hz			
Stand-by consumption	1,3 W	0,8 W	1,3 W	
Setting range brightness	1 – 99000 lx			2 – 2000 lx
Switch-on delay	0 – 59 min			
Type of contact	Changeover contact		2 two-way changeover contacts	Changeover contact
Switching output	Potential-free, not for SELV	Potential-free	Potential-free, not for SELV	
Width	2 modules		3 modules	
Switching capacity	16 A (at 250 V AC, cos φ = 1), 10 A (at 250 V AC, cos φ = 0.6), 10 AX (Fluorescent lamp load)	16 A (at 250 V AC, cos φ = 1), 2 AX (Fluorescent lamp load)	16 A (at 250 V AC, cos φ = 1), 10 A (at 250 V AC, cos φ = 0.6), 10 AX (Fluorescent lamp load)	
Switching capacity min.	Approx. 10 mA			
Incandescent lamp load	2600 W	1400 W	2600 W	
Fluorescent lamp load (conventional) not corrected, series-corrected, lead-lag circuit	2300 VA	1400 VA	2300 VA	
Fluorescent lamp load (conventional) parallel-corrected	800 VA, 80 µF	58 W, 7 µF	800 VA, 80 µF	
LED lamp < 2 W	30 W	6 W	30 W	
LED lamp 2 – 8 W	100 W	20 W	100 W	
LED lamp > 8 W	120 W	24 W	120 W	
Energy saving lamps	170 W	45 W	170 W	
Fluorescent lamp load (electronic ballast)	650 W	180 W	650 W	
Test approval		–		
Ambient temperature	– 30 °C ... +55 °C			
Protection class	II, Sensor III			
Max. cable length to sensor	100 m			

Accessories



PC set OBELISK top2
↳ Art.No.: 9070409
Details page 279



Memory card OBELISK top2
↳ Art.No.: 9070404
Details page 279



Antenna top2 RC-DCF
for LUNA 121 top2 RC, LUNA 122 top2 RC
↳ Art.No.: 9070410
Details page 279

Light sensors
Details page 285

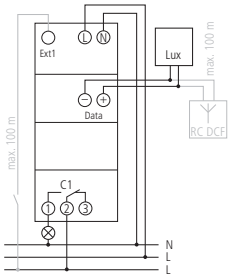
Wall mounting kits
Details page 278

Front panel kit
Details page 278

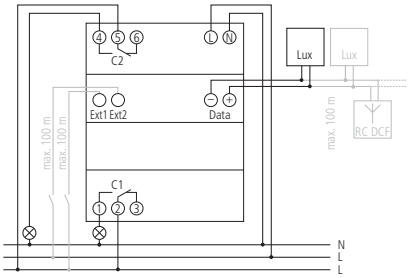
Antenna top2 RC-GPS
Details page 279

Power unit top2 GPS
Details page 279

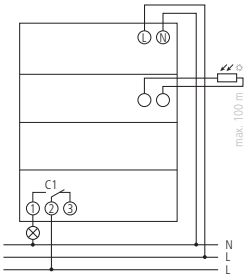
Connection diagrams



LUNA 121 top2 RC



LUNA 122 top2 RC



LUNA 120 top2

Time and light control

Twilight switches, Wall installation or mast bracket



LUNA 126 star

LUNA 129 star-time

6

Description

Common functions

- Twilight switch with integrated light sensor
- Cable feed from the back and from below
- Captive screws
- Large terminal area
- Brightness value can be set without opening the device
- Large light exposure angle (approx. 180 degrees)

LUNA 126 star

- Fixed On and Off switching delay
- Infinitely adjustable switching brightness

LUNA 127 star

- Adjustable On and Off switching delay
- Test button
- Infinitely adjustable switching brightness

LUNA 128 star

As LUNA 127 star, but:

- Expanded brightness range
- for monitoring installation independent of set brightness value. The button can be accessed without opening the device

LUNA 129 star-time

- Time function for freely-programmable night switch-off (daily program)
- Adjustable On and Off switching delay
- Easy programming philosophy
- Preset night switch-off (23.00 OFF / 5.00 ON), lux values and switch delay
- Automatic summer / winter time correction
- Integrated replaceable lithium battery enables programming before installation
- Switching brightness and switching delay can be set digitally for switching On and Off separately
- Test button
- Time function can be deactivated

Product selection

Setting range brightness	Switch-on delay	Switching capacity at 230 V AC	Time program	Type	Article number
5–200 lx	40 s	16 (10) A AX	–	LUNA 126 star	1260700
2–200 lx	2–100 s	16 (10) A AX	–	LUNA 127 star	1270700
2–2000 lx	2–100 s	16 (10) A AX	–	LUNA 128 star	1280700
2–200 lx	0–10 min	16 (10) A AX	Daily program	LUNA 129 star-time	1290700

Technical data

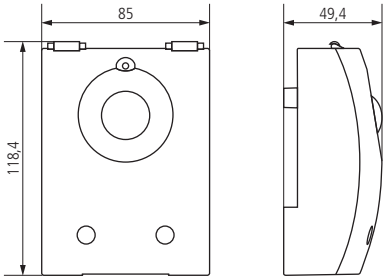
	LUNA 126 star	LUNA 127 star	LUNA 128 star	LUNA 129 star-time
Operating voltage	220–230 V AC			
Frequency	50–60 Hz			
Stand-by consumption	0,6 W			
Setting range brightness	5–200 lx	2–200 lx	2–2000 lx	2–200 lx
Switch-on delay	40 s	2–100 s		0–10 min
Type of contact	NO contact			
Switching output	Not potential-free (230 V)			
Switching capacity	16 A (at 230 V AC, cos φ = 1), 10 AX (at 230 V AC, cos φ = 0.3)			
Incandescent lamp load	2300 W			
Fluorescent lamp load (conventional) not corrected, series-corrected, lead-lag circuit	2300 VA			
Energy saving lamps	90 W			
LED lamp < 2 W	20 W			
LED lamp 2–8 W	55 W			
LED lamp > 8 W	70 W			
Test approval				
Ambient temperature	–35 °C ... +55 °C			
Type of protection	IP 55			
Protection class	II			

Accessories



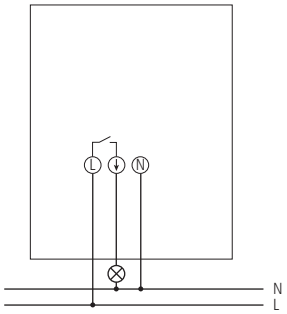
Adapter plate LUNA star
↳ Art.No.: 9070486
Details page 285

Scale drawings

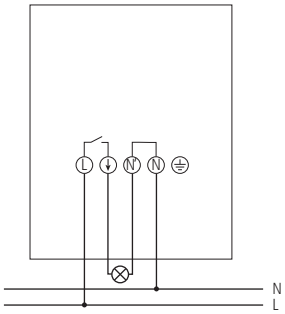


LUNA 126 star, LUNA 127 star, LUNA 128 star, LUNA 129 star-time

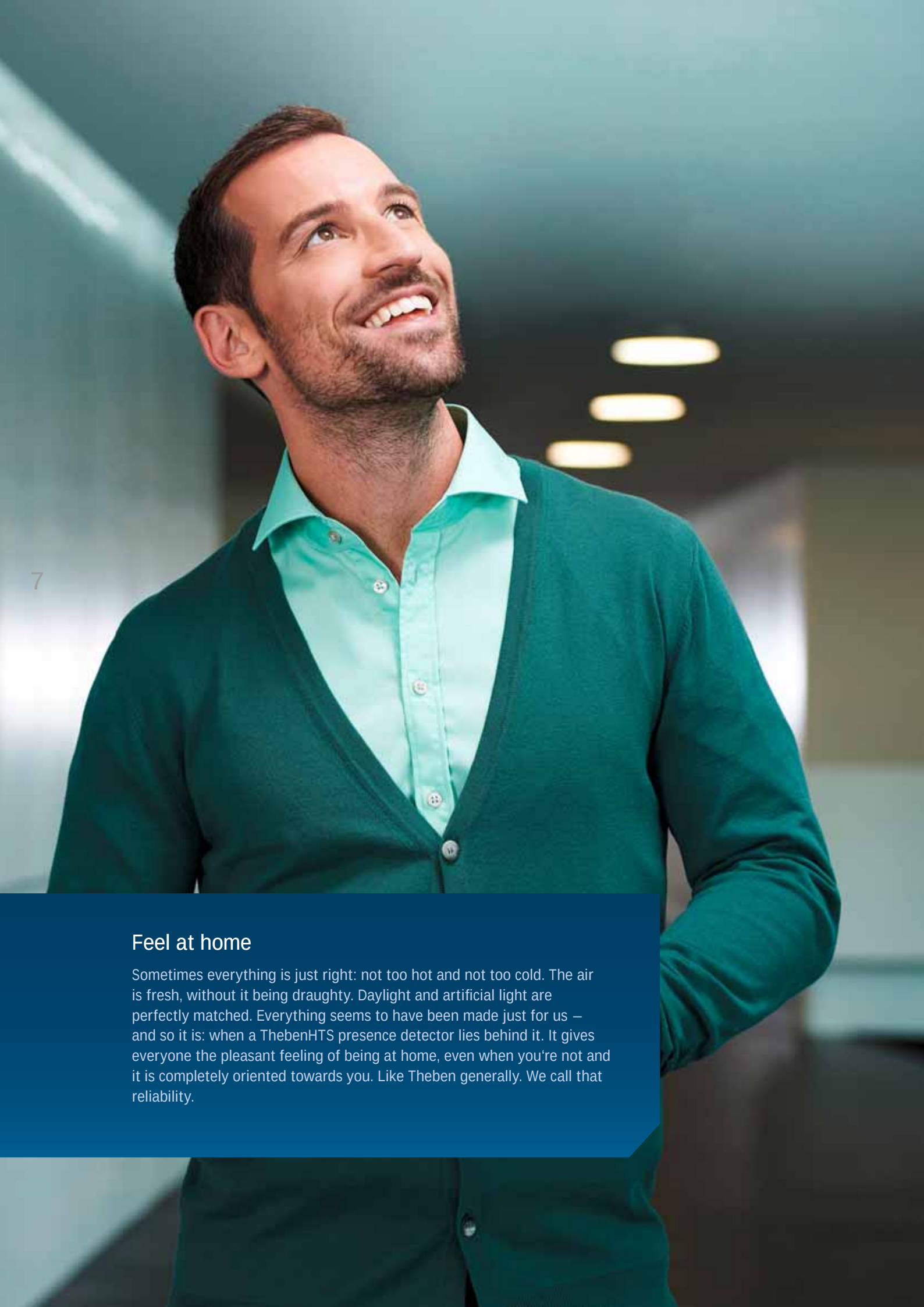
Connection diagrams



LUNA 126 star, LUNA 127 star, LUNA 128 star



LUNA 129 star-time



Feel at home

Sometimes everything is just right: not too hot and not too cold. The air is fresh, without it being draughty. Daylight and artificial light are perfectly matched. Everything seems to have been made just for us – and so it is: when a ThebenHTS presence detector lies behind it. It gives everyone the pleasant feeling of being at home, even when you're not and it is completely oriented towards you. Like Theben generally. We call that reliability.

	Installation type	Detection range - Sitting | 3,0 m -	Detection range - Walking | 3,0 m -	Channel	Function	Type of protection	Type	Page
230 V AC								
	Ceiling	20 m² (4,5 x 4,5 m)	49 m² (7,0 x 7,0 m)	Light	Switching	IP 54	PresenceLight 360	86
	Ceiling, suface mounted	20 m² (ø 5,0 m | 360°)	133 m² (ø 13 m | 360°)	Light	Switching	IP 41	SPHINX 104-360 AP	88
				Light | Presence	Switching	IP 41	SPHINX 104-360/2 AP	88
	Ceiling			Light	Switching	IP 41	SPHINX 104-360	88
				Light | Presence	Switching	IP 41	SPHINX 104-360/2	88
		28 m² (ø 6,0 m | 360°)	452 m² (ø 24 m | 360°)	Light | Presence	Switching	IP 40	SPHINX 104-360/2 DIMplus	90
	Ceiling	50 m² (ø 8,0 m | 360°)	452 m² (ø 24 m | 360°)	Light | Presence	Switching	IP 40	theRonda P360-101	92
				Light	Switching	IP 40	theRonda P360-100	92
		20 m² (4,5 x 4,5 m)	49 m² (7,0 x 7,0 m)	Light | 1–10 V	Dimming	IP 40	compact office DIM	94
				DALI	Dimming	IP 40	compact office DALI	96
		90 m² (20 x 4,5 m)	135 m² (30,0 x 4,5 m)	Light | Presence	Switching	IP 40	compact passage	98
		45 m² (10 x 4,5 m)	68 m² (15,0 x 4,5 m)	Light | Presence	Switching	IP 40	compact passimo	100
		25 m² (5,0 x 5,0 m)	49 m² (7,0 x 7,0 m)	Light | Presence	Switching	IP 40	thePrema S360-101 E	102
				Light	Switching	IP 40	thePrema S360-100 E	102
		49 m² (7,0 x 7,0 m)	81 m² (9,0 x 9,0 m)	Light | Presence	Switching	IP 40	thePrema P360-101 E	104
				2 x Light	Switching	IP 40	ECO-IR DUAL-C NT	106
	Ceiling	49 m² (7,0 x 7,0 m)	81 m² (9,0 x 9,0 m)	Light | Presence	Switching	IP 40	PlanoCentro 101-EWH	108
				–	Switching	IP 40	PlanoCentro 000-EWH	108
	Ceiling	49 m² (7,0 x 7,0 m)	81 m² (9,0 x 9,0 m)	Light | Presence	Switching	IP 40	PlanoCentro 101-UWH	108
				–	Switching	IP 40	PlanoCentro 000-UWH	108
	Ceiling	49 m² (7,0 x 7,0 m)	81 m² (9,0 x 9,0 m)	3 x Light	Switching	IP 40	PlanoCentro 300-EWH	110
				2 x Light | 1 x Presence	Switching	IP 40	PlanoCentro 201-EWH	110
	Ceiling	49 m² (7,0 x 7,0 m)	81 m² (9,0 x 9,0 m)	3 x Light	Switching	IP 40	PlanoCentro 300-UWH	110
				2 x Light | 1 x Presence	Switching	IP 40	PlanoCentro 201-UWH	110
	Wall	28 m² (ø 7,0 m | 180°)	100 m² (ø 16 m | 180°)	Light	Switching	IP 54	PresenceLight 180	114
		32 m² (ø 8,0 m | 180°)		Light | Presence	Switching	IP 40	ECO-IR 180A	116
24 V AC/DC								
	Ceiling	20 m² (4,5 x 4,5 m)	49 m² (7,0 x 7,0 m)	Light | Presence	Switching 24 V	IP 40	compact office 24V	118
				Light | 0–10 V	Switching 24 V	IP 40	compact office 24V Lux	120
		90 m² (20 x 4,5 m)	135 m² (30,0 x 4,5 m)	Light | Presence	Switching 24 V	IP 40	compact passage 24V	122
		45 m² (10 x 4,5 m)	68 m² (15,0 x 4,5 m)	Light | Presence	Switching 24 V	IP 40	compact passimo 24V	124
		49 m² (7,0 x 7,0 m)	81 m² (9,0 x 9,0 m)	Light | Presence	Switching 24 V	IP 40	ECO-IR 360-24V	126
	Wall	32 m² (ø 8,0 m | 180°)	100 m² (ø 16 m | 180°)	Light | Presence	Switching 24 V	IP 40	ECO-IR 180-24V	128

Presence and motion detectors

Presence detectors, 230 V AC



PresenceLight 360

Description

- Presence detector (PIR)
- Automatic control of lighting depending on presence and brightness
- Square detection area allows accurate and simple planning
- IP 54 for versatile use
- Light switch output (relay, 230 V)
- Mixed light measurement, suitable for fluorescent lamps (FL/PL/ESL), halogen/incandescent lamps and LEDs
- Brightness threshold and self-learning switch-off delay adjustable
- Pulse function for staircase time switch
- Parameters can be set using the potentiometers or via the optional service remote controls
- Optional user remote control
- Ready for use by ex-factory set items
- Test operation to check detection area and installation
- Ceiling mounting in flush-mounted box
- Possibility of surface mounting by using a surface frame

Product selection

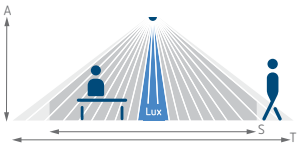
Installation type	Channel	Operating voltage	Colour	Type	Article number
Ceiling installation	Light	230 V AC	Pure white (similar to RAL 9010)	PresenceLight 360	2000000
			Black (similar to RAL 9005)	PresenceLight 360 BK	2000800
			Silver (similar to RAL 9006)	PresenceLight 360 SR	2000801
			Additional colours available upon request		

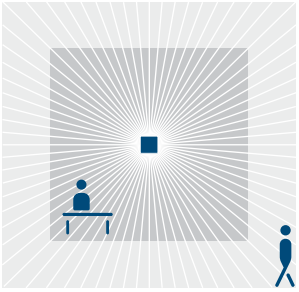
Technical data

	PresenceLight 360
Operating voltage	230 V AC
Frequency	50 Hz
Installation height	2 – 3,5 m
Power consumption	0,7 W
Setting range brightness	Approx. 10 – 1500 lx/on
Light switch-off delay	Pulse (0,5 s), 10 s – 20 min
Type of contact light	Relay 230 V
Resistive load	1400 W
Incandescent/halogen lamp load	1200 W
Compact and flourescent lamps	960 VA (cos φ = 0,8), 580 VA (cos φ = 0,5)
Compact and flourescent lamps (max. number of electronic ballasts)	10 x (1 x 54/58 W), 5 x (2 x 54/58 W), 16 x (1 x 35/36 W), 8 x (2 x 35/36 W), 16 x (smaller than 35/36 W)
LED lamp < 2 W	25 W
LED lamp 2 – 8 W	70 W
LED lamp > 8 W	80 W
Size of concealed housing	Ø 55 mm (NIS, PMI)
Ambient temperature	–20 °C ... +50 °C
Type of protection	IP 54 (when fitted)

Detection range (Square)

Mounting height (A)	Walking (T)	Sitting (S)
2 m	20 m² | 4,5 m x 4,5 m ± 0,5 m	9 m² | 3 m x 3 m
2,5 m	36 m² | 6 m x 6 m ± 0,5 m	16 m² | 4 m x 4 m
3 m	49 m² | 7 m x 7 m ± 1 m	20 m² | 4,5 m x 4,5 m
3,5 m	64 m² | 8 m x 8 m ± 1 m	–





Accessories



Surface frame PresenceLight
↳ Art.No.: 9070513
Details page 280



Ceiling installation box 73A
↳ Art.No.: 9070917
Details page 281



clic
↳ Art.No.: 9070515
Details page 283

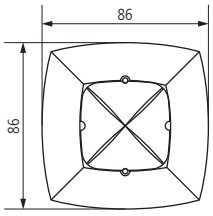


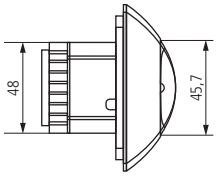
SendoPro 868-A
↳ Art.No.: 9070675
Details page 283

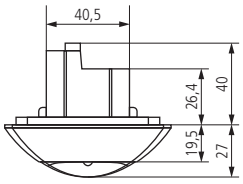


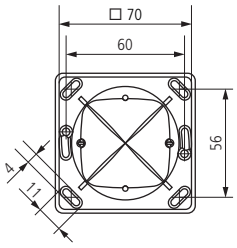
QuickSafe
↳ Art.No.: 9070531
Details page 282

Scale drawings

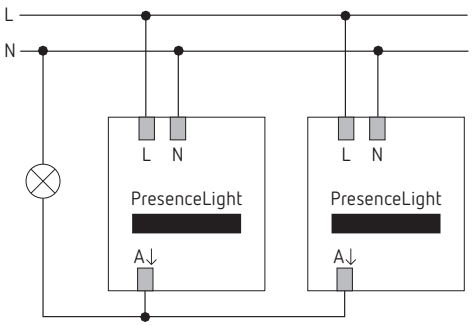


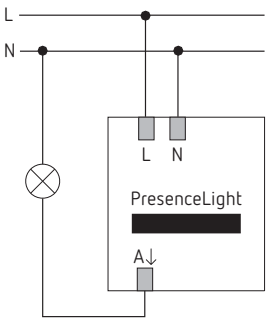






Connection diagrams





Presence detectors, 230 V AC



Description

Common functions

- Presence detector (PIR)
- Lighting control with adjustable light threshold value and adjustable switch-off delay
- Teach-in of current brightness value possible via remote control
- Additional Pulsee function can be selected for combination with staircase timer (ELPA), building automation or PLC
- Master / slave function: Up to ten detectors to expand detection area
- Test function for checking detection area
- Zero-cross switching
- Automatic lighting control based on presence and brightness
- Detection area can be limited using three enclosed segments
- Mixed light measurement suitable for the control of fluorescent, incandescent and halogen lamps
- Instant start-up possible via factory preset
- Push-button or switch options for manual switching
- Screwless terminals for quick installation

SPHINX 104-360 AP

- 1 channel
- Surface-mounted installation

SPHINX 104-360 / 2 AP

- 2 channels
- Surface-mounted installation
- 2. Relay for HVAC control, presence dependent
- HVAC control with programmable switch-on and switch-off delay

SPHINX 104-360

- 1 channel
- Flush-mounted installation

SPHINX 104-360 / 2

As SPHINX 104-360 / 2 AP, but:

- Flush-mounted installation

Product selection

Installation type	Channel	Detection angle	Colour	Type	Article number
Ceiling installation, Suface mounted	Light	360°	Pure white (similar to RAL 9010)	SPHINX 104-360 AP	1040360
	Light | Presence	360°	Pure white (similar to RAL 9010)	SPHINX 104-360 / 2 AP	1040362
Ceiling installation	Light	360°	Pure white (similar to RAL 9010)	SPHINX 104-360	1040370
	Light | Presence	360°	Pure white (similar to RAL 9010)	SPHINX 104-360 / 2	1040372

Technical data

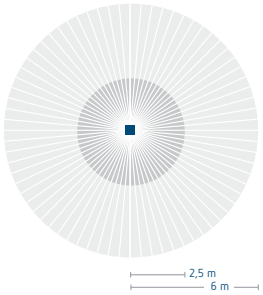
	SPHINX 104-360 AP	SPHINX 104-360 / 2 AP	SPHINX 104-360	SPHINX 104-360 / 2
Operating voltage	230 V AC			
Frequency	50 – 60 Hz			
Stand-by consumption	1 W			
Setting range brightness	10 – 2000 lx			
Switching capacity light	16 A (at 230 V AC, cos φ = 1)		8 A (at 230 V AC, cos φ = 1)	
Switching capacity presence	–	5 A (cos φ = 1) 250 V AC / 30 V DC	–	3 A (cos φ = 1) 250 V AC / 30 V DC
Detection angle	360°			
Installation height	2,5 – 3,5 m			
Light switch-off delay	1 s – 20 min			
Presence switch-off delay	–	1 – 120 min	–	1 – 120 min

Additional technical data at: www.theben.de / product / Articlenumber

	SPHINX 104-360 AP	SPHINX 104-360/2 AP	SPHINX 104-360	SPHINX 104-360/2
Switch-on delay presence	–	0–60 min	–	0–60 min
Incandescent lamp load	2000 W		1800 W	
Fluorescent lamp load (conventional) not corrected	900 VA			
Fluorescent lamp load (conventional) parallel-corrected	400 VA, 42 µF			
Fluorescent lamp load (conventional) series-corrected	900 VA			
Fluorescent lamp load (conventional) lead-lag circuit	900 VA			
Energy saving lamps	4 x 7 W, 3 x 11 W, 3 x 15 W, 3 x 20 W, 3 x 23 W			
LED lamp < 2 W	25 W			
LED lamp > 2 W	90 W			
Ambient temperature	–10 °C … +55 °C			
Protection class	II			
Type of protection	IP 41 (when fitted)			

Detection range (Round)

Mounting height	Sitting	Walking diagonally	Walking head on to
2 m	4 m	9 m	6 m
2,5 m	5 m	12 m	6 m
3 m	5 m	12 m	6 m
3,5 m	6 m	14 m	7 m
4 m	5 m	12 m	6 m



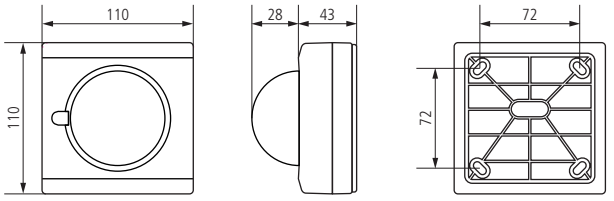
Accessories

SPHINX RC 104 Pro
Details page 284

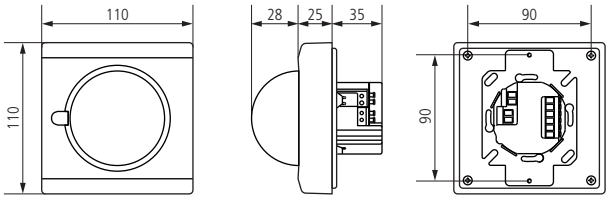
SPHINX RC 104
Details page 284

RC filter
Details page 283

Scale drawings

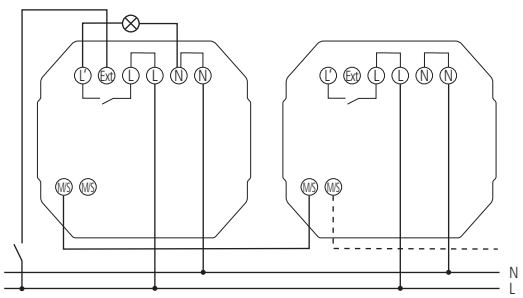


SPHINX 104-360 AP, SPHINX 104-360/2 AP

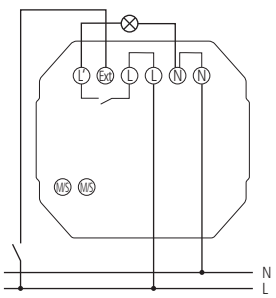


SPHINX 104-360, SPHINX 104-360/2

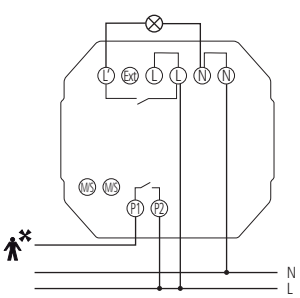
Connection diagrams



SPHINX 104-360 AP, SPHINX 104-360



SPHINX 104-360 AP,
SPHINX 104-360



SPHINX 104-360/2 AP,
SPHINX 104-360/2

Presence detectors, 230 V AC



Description

- Presence detector (PIR)
- 2 channels for application areas class and conference rooms
- Flush-mounted installation
- Channel 2 presence dependent, e.g. for blackboard lighting with programmable switch-off delay or for HVAC control
- Channel 1 for constant light control (1-10 V)
- Lighting control with adjustable light threshold value and adjustable switch-off delay
- Additional pulse function can be selected for combination with staircase timer (ELPA), building automation or PLC
- Test function for checking detection area
- Zero-cross switching
- Automatic lighting control based on presence and brightness
- Detection area can be limited using three enclosed segments
- Mixed light measurement suitable for the control of fluorescent, incandescent and halogen lamps
- Instant start-up possible via factory preset
- Push-button or for manual switching
- Fully or semi-automatic: In „Fully automatic" mode, the lighting switches on and off automatically according to presence and light In „Semi-automatic" mode, it must be switched on manually and it switches off automatically

Product selection

Installation type	Channel	Detection angle	Colour	Type	Article number
Ceiling installation	Light | Presence	360°	Pure white (similar to RAL 9010)	SPHINX 104-360 / 2 DIMplus	1040374

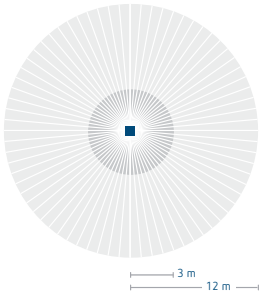
Technical data

SPHINX 104-360 / 2 DIMplus	
Operating voltage	230 V AC
Frequency	50 – 60 Hz
Stand-by consumption	1 W
Setting range brightness	5 – 2000 lx
Switching capacity light	4 A (at 230 V AC, cos φ = 1)
Switching capacity presence	2 A (cos φ = 1) µ, 250 V AC / 30 V DC
Detection angle	360°
Installation height	2,5 – 3,5 m
Switching output	Not potential-free (230 V)
Switching output channel presence	Potential-free
Light switch-off delay	1 s – 20 min
Presence switch-off delay	1 – 120 min
Incandescent lamp load	1000 W
Incandescent lamp load channel presence)	400 W

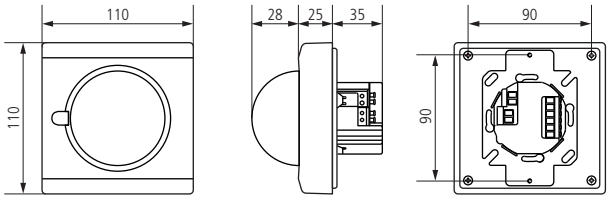
Fluorescent lamp load (conventional) not corrected	900 VA
Fluorescent lamp load (conventional) not corrected (channel presence)	200 VA
Fluorescent lamp load (conventional) series-corrected	900 VA
Fluorescent lamp load (conventional) series-corrected (channel presence)	200 VA
Fluorescent lamp load (electronic ballast) (channel presence)	60 VA
Energy saving lamps	4 x 7 W, 3 x 11 W, 3 x 15 W, 3 x 20 W, 3 x 23 W
Energy saving lamps (channel presence)	2 x 7 W, 2 x 11 W, 1 x 15 W, 1 x 20 W, 1 x 23 W
LED lamp < 2 W	25 W
LED lamp > 2 W	90 W
Ambient temperature	– 10 °C ... +55 °C
Protection class	II
Type of protection	IP 40 (when fitted)

Detection range (Round)

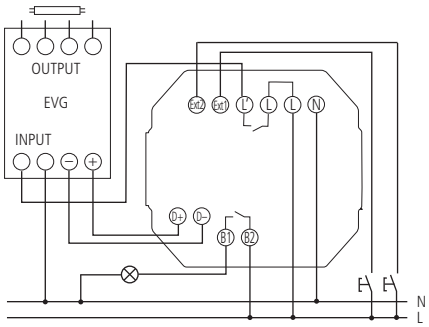
Mounting height	Sitting	Walking diagonally	Walking head on to
2 m	4 m	18 m	9 m
2,5 m	6 m	24 m	12 m
3 m	6 m	24 m	12 m
3,5 m	8 m	26 m	13 m
4 m	6 m	24 m	12 m



Scale drawings



Connection diagrams



Accessories



RC filter
↳ Art.No.: 9070523
Details page 283

Presence detectors, 230 V AC



theRonda P360 UP WH

Description

- Passive infrared presence detector for ceiling mounting
- Round detection area 360°, up to Ø 24 m (452 m²)
- Mixed light measurement suitable for fluorescent lamps (FL/PL/ESL), halogen/incandescent lamps and LEDs
- Channel A, light: relay, 230V
- Choice of fully or semi-automatic (absence detection) operation
- Adjustable brightness switching value, teach-in function
- Reduction of switch-off delay time in the event of short presence (brief-presence)
- Connection option for sensors or switches for manual switching with automatic recognition of sensor/switch
- Pulse function for staircase light time switch
- Sensitivity adjustable
- Detection area can be limited using cover clip
- Ready for immediate use due to factory preset
- Test mode for checking function and detection area
- Ceiling installation in flush-mounted socket
- Ceiling installation also possible with surface-mounted frame
- User remote control theSenda S, management remote control SendoPro (optional)

theRonda P360-101

- Automatic presence- and brightness-dependent control for lighting and HVAC
- Channel H, presence: relay, floating
- e.g. for HVAC control
- Switch-on delay and switch-off delay configurable

theRonda P360-100

- Automatic presence- and brightness-dependent control for lighting

Product selection

Installation type	Channel	Operating voltage	Colour	Type	Article number
Ceiling installation	Light | Presence	110–230 V AC	White	theRonda P360-101 UP WH	2080005
			Grey	theRonda P360-101 UP GR	2080006
	Light	110–230 V AC	White	theRonda P360-100 UP WH	2080000
			Grey	theRonda P360-100 UP GR	2080001
			Additional colours available upon request		

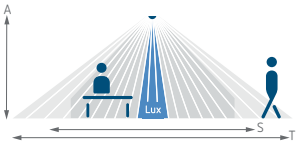
Technical data

	theRonda P360-101 UP	theRonda P360-100 UP
Operating voltage	110–230 V AC	
Frequency	50–60 Hz	
Installation height	2–10 m	
Power consumption	0,1 W	
Setting range brightness	Approx. 30–3000 lx/on	
Light switch-off delay	Pulse (0,5 s), 10 s–60 min	
Incandescent/halogen lamp load	2300 W	
Compact and flourescent lamps	1150 VA (cos φ = 0,5)	
Compact and flourescent lamps (max. number of electronic ballasts)	16 x 54/58 W, 24 x 35/36 W, 8 x 2 x 54/58 W, 12 x 2 x 35/36 W	
LED lamp < 2 W	60 W	
LED lamp 2–8 W	180 W	
LED lamp > 8 W	200 W	
Switch-on delay presence	0 s–10 min	–
Presence switch-off delay	10 s–120 min	–
Switching capacity presence	50 W/50 VA, max. 2 A	–
Size of concealed housing	Ø 55 mm (NIS, PMI)	
Ambient temperature	–15 °C … +50 °C	
Type of protection	IP 54 (when fitted)	

Detection range (Round)

Mounting height (A)	Sitting (S)	Walking diagonally (T)	Walking head on to
2 m	20 m² | 5 m	380 m² | 22 m	28 m² | 6 m
2,5 m	28 m² | 6 m	415 m² | 23 m	38 m² | 7 m
3 m	38 m² | 7 m	452 m² | 24 m	50 m² | 8 m
3,5 m	38 m² | 7 m	452 m² | 24 m	50 m² | 8 m
6 m	–	452 m² | 24 m	50 m² | 8 m
10 m	–	491 m² | 25 m	50 m² | 8 m

With a mounting height of more than 3.5 m walking motions are necessary and the detection areas of several detectors should overlap in the marginal zone. All figures are up to values. The detection range decreases with increasing temperatures.



Accessories



Surface frame 110A WH
↳ Art.No.: 9070912
Details page 280



theSenda P
↳ Art.No.: 9070910
Details page 285



theSenda S
↳ Art.No.: 9070911
Details page 285

QuickSafe
Details page 282

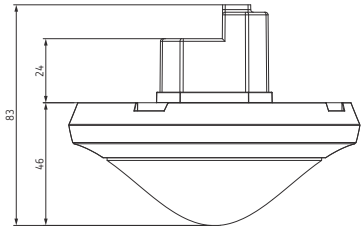
Ceiling installation box 73A
Details page 281

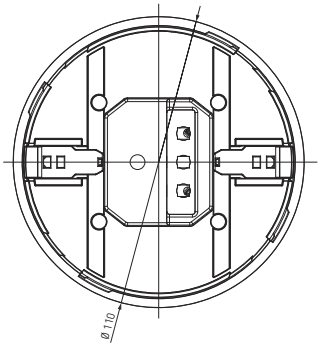
Masking clip
Details page 281

SendoPro 868-A
Details page 283

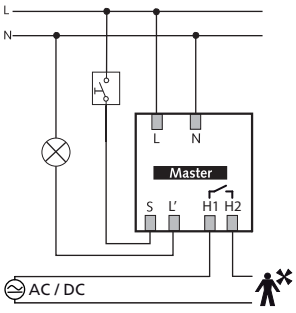
7

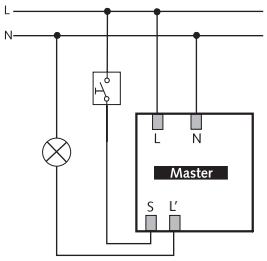
Scale drawings





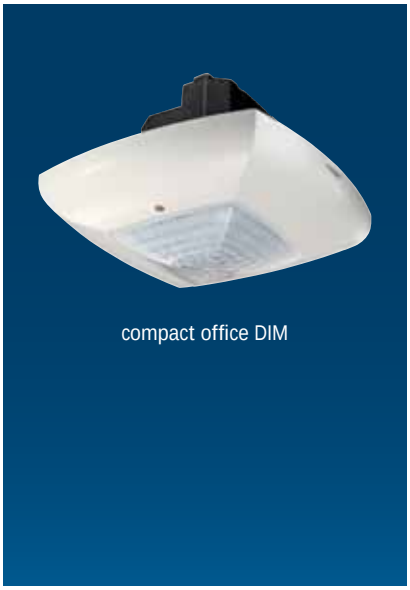
Connection diagrams





Presence and motion detectors

Presence detectors, 230 V AC



compact office DIM

Description

- Presence detector (PIR)
- Automatic control of lighting depending on presence and brightness
- Square detection area allows accurate and simple planning
- Light switching output (relay, 230 V) and 1 – 10 V interface
- Mixed light measurement, suitable for fluorescent lamps (FL / PL / ESL), halogen / incandescent lamps and LEDs
- Brightness threshold, self-learning switch-off delay and stand-by time adjustable
- The stand-by time guarantees a minimum brightness and provides for a sense of security in hospital and care environments as the lighting does not switch off when areas are unoccupied but remains in stand-by mode for the set time
- Choice of fully or semi automatic operation: In „Semi-automatic" (absence detection) mode the light must be switched on manually and switches off automatically
- Parameters can be set using the potentiometers or via the optional service remote controls
- Optional user remote control
- Ready for use by ex-factory set items
- Test operation to check detection area and installation
- Master / slave or master / master parallel switching: Up to ten detectors can be connected with each other to extend the detection area
- Ceiling mounting in flush-mounted box
- Possibility of surface mounting by using a surface frame

Product selection

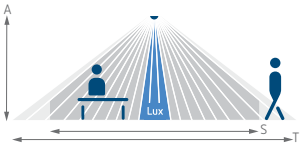
Installation type	Channel	Operating voltage	Colour	Type	Article number
Ceiling installation	Light | 1 – 10 V	230 V AC	Pure white (similar to RAL 9010)	compact office DIM	2010001
			Black (similar to RAL 9005)	compact office DIM BK	2010803
			Silver (similar to RAL 9006)	compact office DIM SR	2010804
			Additional colours available upon request		

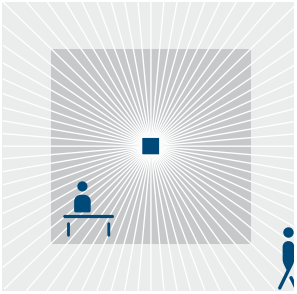
Technical data

	compact office DIM
Operating voltage	230 V AC
Frequency	50 Hz
Installation height	2 – 3,5 m
Power consumption	0,8 W
Setting range brightness	Approx. 10 – 1500 lx / on
Light switch-off delay	10 s – 20 min
Stand-by time light	0 s – 60 min / on
Stand-by brightness	10 %
Type of contact light	Relay 230 V
Resistive load	1400 VA
Incandescent / halogen lamp load	1200 W
Compact and flourescent lamps	960 VA (cos φ = 0,8), 580 VA (cos φ = 0,5)
Compact and flourescent lamps (max. number of electronic ballasts)	10 x (1 x 54 / 58 W), 5 x (2 x 54 / 58 W), 16 x (1 x 35 / 36 W), 8 x (2 x 35 / 36 W), 16 x (smaller than 35 / 36 W)
Control output	1 – 10 V DC / 100 mA as per EN 60929 / A1
Size of concealed housing	Ø 55 mm (NIS, PMI)
Ambient temperature	0 °C ... +50 °C
Type of protection	IP 40 (when fitted)

Detection range (Square)

Mounting height (A)	Walking (T)	Sitting (S)
2 m	20 m² | 4,5 m x 4,5 m ± 0,5 m	9 m² | 3 m x 3 m
2,5 m	36 m² | 6 m x 6 m ± 0,5 m	16 m² | 4 m x 4 m
3 m	49 m² | 7 m x 7 m ± 1 m	20 m² | 4,5 m x 4,5 m
3,5 m	64 m² | 8 m x 8 m ± 1 m	–





Accessories



Surface frame compact
↳ Art.No.: 9070514
Details page 280



SendoPro 868-A
↳ Art.No.: 9070675
Details page 283

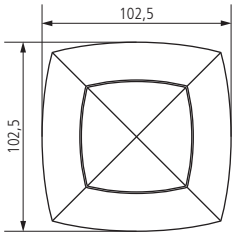


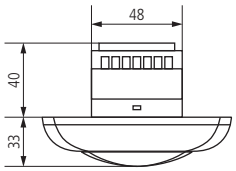
clic
↳ Art.No.: 9070515
Details page 283

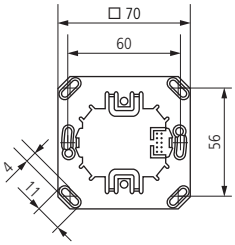
QuickSafe
Details page 282

Ceiling installation box 73A
Details page 281

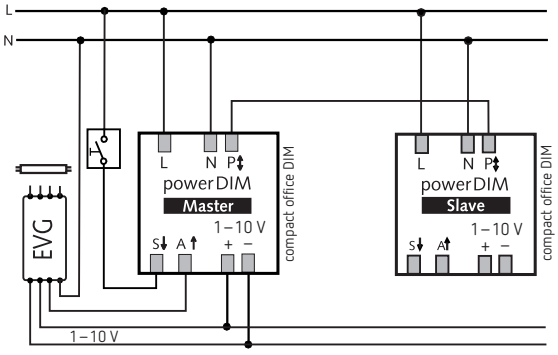
Scale drawings

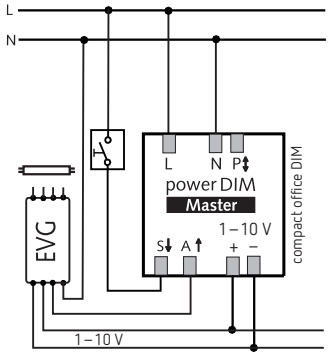






Connection diagrams





Presence and motion detectors

Presence detectors, 230 V AC



compact office DALI

Description

- Presence detector (PIR)
- Square 360° detection range for an accurate and simple planning
- DALI interface in accordance with EN 62386 for max. 25 DALI electronic ballasts
- Automatic allocation of DALI participants (DALI Broadcast)
- Automatic lighting regulation with constant light control
- Mixed light measurement suitable for switching fluorescent lamps (FL / PL), halogen and incandescent lamps as well as LEDs
- Facility to connect a push button for manual dimming and switching (single-button control)
- Fully or semi-automatic (absence detection) operation switch-selectable
- Brightness switching level, self-learning switch-off delay time, stand-by time and stand-by brightness can be adjusted
- Scene component with two built-in scenes
- Ready for immediate use due to factory preset
- Test mode for checking function and detection area
- Extension of detection area via Master / Slave or Master / Master switching, a maximum of 10 detectors can be switched at the same time
- Ceiling installation in flush-mounted socket
- Ceiling installation possible with surface-mounted frame
- User remote control (option)
- Service remote control SendoPro (option)

Product selection

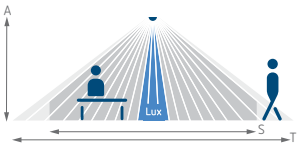
Installation type	Channel	Operating voltage	Colour	Type	Article number
Ceiling installation	DALI	230 V AC	Pure white (similar to RAL 9010)	compact office DALI WH	2010010
			Black (similar to RAL 9005)	compact office DALI BK	2010011
			Silver (similar to RAL 9006)	compact office DALI SR	2010012
			Additional colours available upon request		

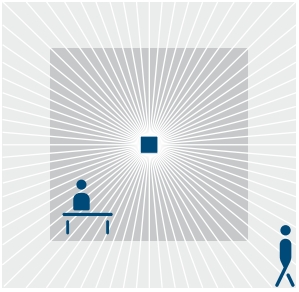
Technical data

	compact office DALI
Operating voltage	230 V AC
Frequency	50 Hz
Installation height	2 – 3,5 m
Power consumption	0,5 W
Setting range brightness	5 – 2000 lx
Light switch-off delay	10 s – 60 min
Stand-by time light	0 s – 60 min / on
Stand-by brightness	1 – 25 %
Control output light	50 mA, DALI-interface according to IEC SN EN 62 386 for max. 25 DALI devices
Size of concealed housing	Ø 55 mm (NIS, PMI)
Ambient temperature	0 °C ... +50 °C
Type of protection	IP 40 (when fitted)

Detection range (Square)

Mounting height (A)	Walking (T)	Sitting (S)
2 m	20 m² | 4,5 m x 4,5 m ± 0,5 m	9 m² | 3 m x 3 m
2,5 m	36 m² | 6 m x 6 m ± 0,5 m	16 m² | 4 m x 4 m
3 m	49 m² | 7 m x 7 m ± 1 m	20 m² | 4,5 m x 4,5 m
3,5 m	64 m² | 8 m x 8 m ± 1 m	–





Accessories



Surface frame compact
↳ Art.No.: 9070514
Details page 280



SendoPro 868-A
↳ Art.No.: 9070675
Details page 283



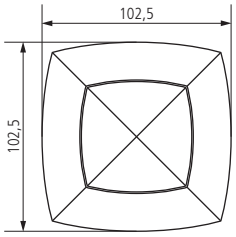
theSenda S
↳ Art.No.: 9070911
Details page 285

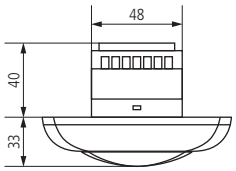
theSenda P
Details page 282

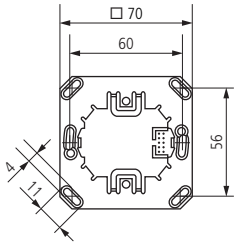
QuickSafe
Details page 282

Ceiling installation box 73A
Details page 281

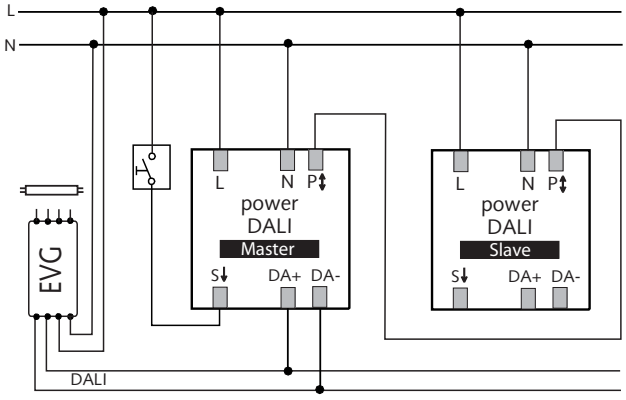
Scale drawings

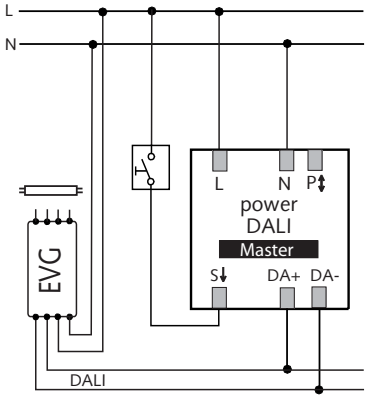






Connection diagrams





Presence and motion detectors

Presence detectors, 230 V AC



compact passage

Description

- Presence detector (PIR)
- Automatic control of lighting depending on presence and brightness
- Rectangular detection area for corridors allows accurate and simple planning
- Light switch output (relay, 230 V)
- Mixed light measurement, suitable for fluorescent lamps (FL/PL/ESL), halogen/incandescent lamps and LEDs
- Brightness threshold and self-learning switch-off delay adjustable
- Push button or switch connection for manual control
- Pulse function for staircase time switch
- Choice of fully or semi automatic operation: In „Semi-automatic" (absence detection) mode the light must be switched on manually and switches off automatically
- Presence switch output (relay, potential-free) for example for HVAC control
- HVAC control with adjustable switch-on and switch-off delay
- Function „monitoring" with reduced sensitivity only to detect walking persons
- Parameters can be set using the potentiometers or via the optional service remote controls
- Optional user remote control
- Ready for use by ex-factory set items
- Test operation to check detection area and installation
- Master/slave or master/master parallel switching: Up to ten detectors can be connected with each other to extend the detection area
- Ceiling mounting in flush-mounted box
- Possibility of surface mounting by using a surface frame

Product selection

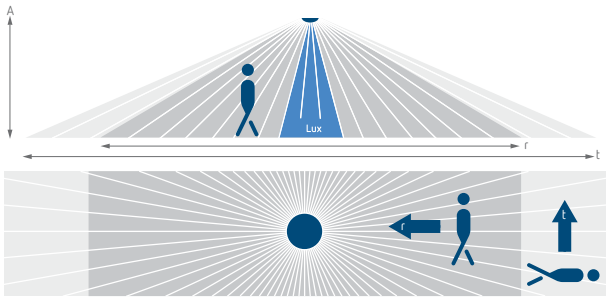
Installation type	Channel	Operating voltage	Colour	Type	Article number
Ceiling installation	Light | Presence	230 V AC	Pure white (similar to RAL 9010)	compact passage	2010090
			Black (similar to RAL 9005)	compact passage BK	2010806
			Silver (similar to RAL 9006)	compact passage SR	2010807
			Additional colours available upon request		

Technical data

	compact passage
Operating voltage	230 V AC
Frequency	50 Hz
Installation height	2 – 6 m
Power consumption	0,7 W
Setting range brightness	Approx. 10 – 1500 lx/on
Light switch-off delay	Pulse (0,5 s), 10 s – 20 min
Type of contact light	Relay 230 V
Resistive load	1400 VA
Incandescent/halogen lamp load	1200 W
Compact and flourescent lamps	960 VA (cos φ = 0,8), 580 VA (cos φ = 0,5)
Compact and flourescent lamps (max. number of electronic ballasts)	10 x (1 x 54/58 W), 5 x (2 x 54/58 W), 16 x (1 x 35/36 W), 8 x (2 x 35/36 W), 16 x (smaller than 35/36 W)
LED lamp < 2 W	25 W
LED lamp 2 – 8	70 W
LED lamp > 8 W	80 W
Switch-on delay presence	0 s – 10 min
Presence switch-off delay	10 s – 120 min
Type of contact presence	Relay potential-free, 220 V DC/250 V AC
Switching capacity presence	50 W (220 V DC), 50 VA (250 V AC) min. 0,5 mV/10 mA
Size of concealed housing	Ø 55 mm (NIS, PMI)
Ambient temperature	0 °C ... +50 °C
Type of protection	IP 40 (when fitted)

Detection range (Rectangular)

Mounting height (A)	Head on to (r)	Diagonally (t)
2 m	56 m² | 16 m x 3,5 m ± 1,5 m	56 m² | 16 m x 3,5 m ± 1,5 m
2,5 m	72 m² | 18 m x 4 m ± 1,5 m	88 m² | 22 m x 4 m ± 1,5 m
3 m	90 m² | 20 m x 4,5 m ± 1,5 m	135 m² | 30 m x 4,5 m ± 1,5 m
3,5 m	100 m² | 20 m x 5 m ± 1,5 m	150 m² | 30 m x 5 m ± 1,5 m
4 m	100 m² | 20 m x 5 m ± 2 m	150 m² | 30 m x 5 m ± 2 m
4,5 m	100 m² | 20 m x 5 m ± 2 m	150 m² | 30 m x 5 m ± 2 m
5 m	100 m² | 20 m x 5 m ± 2,5 m	150 m² | 30 m x 5 m ± 2,5 m
6 m	100 m² | 20 m x 5 m ± 2,5 m	150 m² | 30 m x 5 m ± 2,5 m



Accessories



Surface frame compact
↳ Art.No.: 9070514
Details page 280



SendoPro 868-A
↳ Art.No.: 9070675
Details page 283

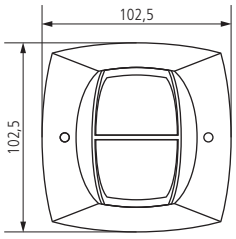


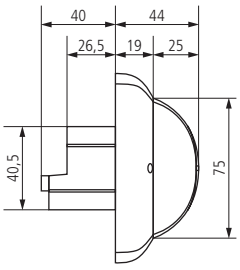
clic
↳ Art.No.: 9070515
Details page 283

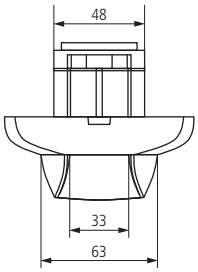
QuickSafe
Details page 282

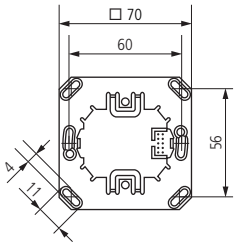
Ceiling installation box 73A
Details page 281

Scale drawings

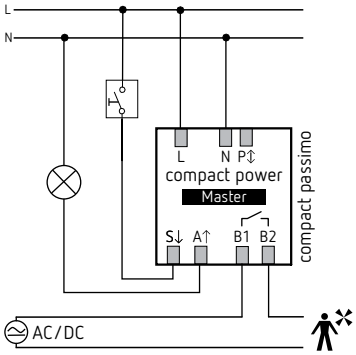


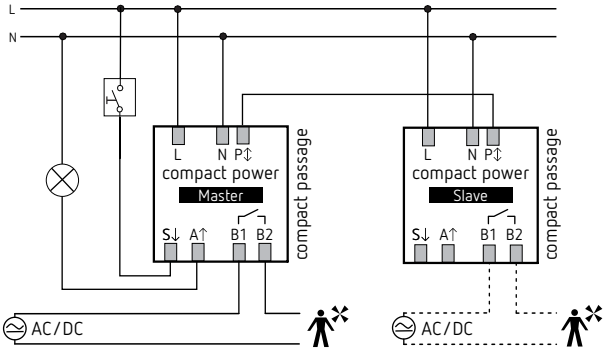






Connection diagrams





Presence and motion detectors

Presence detectors, 230 V AC



compact passimo

Description

- Presence detector (PIR)
- Automatic control of lighting depending on presence and brightness
- Rectangular detection area for storage areas with clear demarcation vertically below the presence detector allows accurate and simple planning
- Light switch output (relay, 230 V)
- Mixed light measurement, suitable for fluorescent lamps (FL/PL/ESL), halogen/incandescent lamps and LEDs
- Brightness threshold and self-learning switch-off delay adjustable
- Push button or switch connection for manual control
- Pulse function for staircase time switch
- Choice of fully or semi automatic operation: In „Semi-automatic" (absence detection) mode the light must be switched on manually and switches off automatically
- Presence switch output (relay, potential-free) for example for HVAC control
- HVAC control with adjustable switch-on and switch-off delay
- Function „monitoring" with reduced sensitivity only to detect walking persons
- Parameters can be set using the potentiometers or via the optional service remote controls
- Optional user remote control
- Ready for use by ex-factory set items
- Test operation to check detection area
- and installation
- Master/slave or master/master parallel switching: Up to ten detectors can be connected with each other to extend the detection area
- Ceiling mounting in flush-mounted box
- Possibility of surface mounting by using a surface frame

Product selection

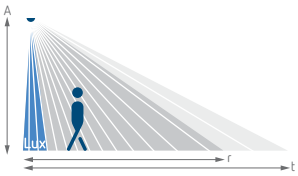
Installation type	Channel	Operating voltage	Colour	Type	Article number
Ceiling installation	Light | Presence	230 V AC	Pure white (similar to RAL 9010)	compact passimo WH	2010080
			Black (similar to RAL 9005)	compact passimo BK	2010809
			Silver (similar to RAL 9006)	compact passimo SR	2010810
			Additional colours available upon request		

Technical data

	compact passimo WH
Operating voltage	230 V AC
Frequency	50 Hz
Installation height	2 – 6 m
Power consumption	0,7 W
Setting range brightness	Approx. 10 – 1500 lx/on
Light switch-off delay	Pulse (0,5 s), 10 s – 20 min
Type of contact light	Relay 230 V
Resistive load	1400 VA
Incandescent/halogen lamp load	1200 W
Compact and flourescent lamps	960 VA (cos φ = 0,8), 580 VA (cos φ = 0,5)
Compact and flourescent lamps (max. number of electronic ballasts)	10 x (1 x 54/58 W), 5 x (2 x 54/58 W), 16 x (1 x 35/36 W), 8 x (2 x 35/36 W), 16 x (smaller than 35/36 W)
LED lamp < 2 W	25 W
LED lamp 2 – 8	70 W
LED lamp > 8 W	80 W
Switch-on delay presence	0 s – 10 min
Presence switch-off delay	10 s – 120 min
Type of contact presence	Relay potential-free, 220 V DC/250 V AC
Switching capacity presence	50 W (220 V DC), 50 VA (250 V AC) min. 0,5 mV/10 mA
Size of concealed housing	Ø 55 mm (NIS, PMI)
Ambient temperature	0 °C ... +50 °C
Type of protection	IP 40 (when fitted)

Detection range (Rectangular)

Mounting height (A)	Head on to (r)	Diagonally (t)
2 m	28 m² | 8 m x 3,5 m ± 1,5 m	28 m² | 8 m x 3,5 m ± 1,5 m
2,5 m	36 m² | 9 m x 4 m ± 1,5 m	44 m² | 11 m x 4 m ± 1,5 m
3 m	45 m² | 10 m x 4,5 m ± 1,5 m	68 m² | 15 m x 4,5 m ± 1,5 m
3,5 m	50 m² | 10 m x 5 m ± 1,5 m	75 m² | 15 m x 5 m ± 1,5 m
4 m	50 m² | 10 m x 5 m ± 2 m	75 m² | 15 m x 5 m ± 2 m
4,5 m	50 m² | 10 m x 5 m ± 2 m	75 m² | 15 m x 5 m ± 2 m
5 m	50 m² | 10 m x 5 m ± 2,5 m	75 m² | 15 m x 5 m ± 2,5 m
6 m	50 m² | 10 m x 5 m ± 2,5 m	75 m² | 15 m x 5 m ± 2,5 m





Accessories



Surface frame compact
↳ Art.No.: 9070514
Details page 280



SendoPro 868-A
↳ Art.No.: 9070675
Details page 283

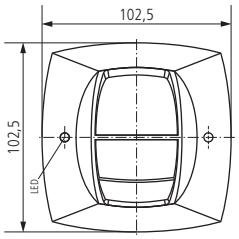


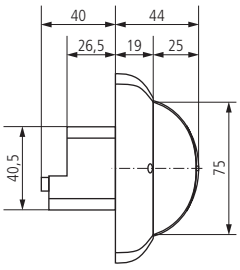
clic
↳ Art.No.: 9070515
Details page 283

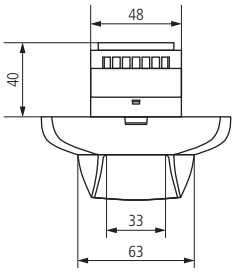
QuickSafe
Details page 282

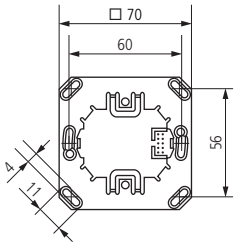
Ceiling installation box 73A
Details page 281

Scale drawings

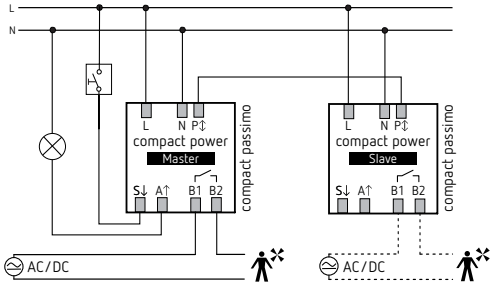


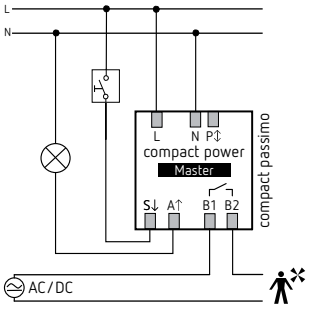






Connection diagrams





Presence and motion detectors

Presence detectors, 230 V AC



Description

- Passive infrared presence detector for ceiling mounting
- Square detection area 360° (up to 64 m²) for reliable and easy planning
- Mixed light measurement suitable for fluorescent lamps (FL/PL/ESL), halogen/incandescent lamps and LEDs
- Choice of fully or semi-automatic (absence detection) operation
- Adjustable brightness switching value, teach-in function
- Self-learning time delay
- Reduction of switch-off delay time in the event of short presence (brief-presence)
- Connection option for sensors or switches for manual switching with automatic recognition of sensor/switch
- Pulse function for staircase light time switch
- Switch-on delay and switch-off delay configurable
- Room monitoring with selective movement detection
- Exceptionally easy configuration of the energy-saving behaviour with the new «eco plus» function
- Staircase time function
- User remote control theSenda S, management remote control SendoPro (optional)
- Ready for immediate use due to factory preset
- Test mode for checking function and detection area
- Extension of detection area via Master/Slave or Master/Master switching, a maximum of 10 detectors can be switched in parallel with each other
- Ceiling installation in flush-mounted socket
- Ceiling installation also possible with surface-mounted frame

thePrema S360-101 E

- Automatic presence- and brightness-dependent control for lighting and HVAC
- Channel A, light: relay, 230 V
- Channel H, presence: relay, floating e.g. for HVAC control
- Operating mode of light and presence relay can be flexibly selected using the remote control SendoPro

thePrema S360-100 E

- Automatic presence- and brightness-dependent control for lighting
- Channel A, light: relay, 230V

thePrema S360 Slave E

- Slave version for thePrema
- Just to be used with thePrema as Master

* According to guarantee conditions, see www.theben.de/en/guarantee

Product selection

Installation type	Channel	Function	Colour	Type	Article number
Ceiling installation	Light | Presence	Master	White	thePrema S360-101 E UP WH	2070605
			Grey	thePrema S360-101 E UP GR	2070606
	Light	Master	White	thePrema S360-100 E UP WH	2070600
			Grey	thePrema S360-100 E UP GR	2070601
	–	Slave	White	thePrema S360 Slave E UP WH	2070630
			Grey	thePrema S360 Slave E UP GR	2070631
			Additional colours available upon request		

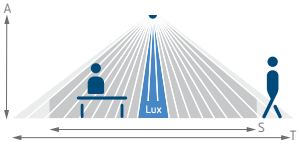
Technical data

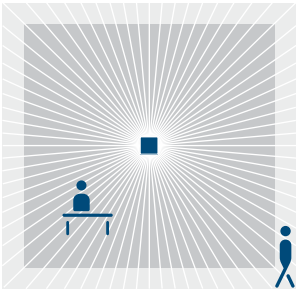
	thePrema S360-101 E UP	thePrema S360-100 E UP	thePrema S360 Slave E UP
Operating voltage	110–230 V AC		
Frequency	50–60 Hz		
Installation height	2–3,5 m		
Power consumption	0,1 W		
Setting range brightness	Approx. 5–3000 lx/on		–
Light switch-off delay	Pulse (0,5 s), 10 s–60 min		–
Type of contact light	Relay 230 V/10 A µ-contact		–
Incandescent/halogen lamp load	2300 W		–

	thePrema S360-101 E UP	thePrema S360-100 E UP	thePrema S360 Slave E UP
Compact and flourescent lamps	1150 VA (cos φ = 0,5)		–
Inrush current	max. 800 A / 200 µs		–
Compact and flourescent lamps (max. number of electronic ballasts)	16 x 54/58 W, 24 x 35/36 W, 8 x 2 x 54/58 W, 12 x 2 x 35/36 W		–
LED lamp < 2 W	60 W		–
LED lamp 2–8 W	180 W		–
LED lamp > 8 W	200 W		–
Switch-on delay presence	0 s–10 min / Room surveillance	–	
Presence switch-off delay	10 s–120 min	–	
Type of contact presence	Relay potential-free, 220 V DC / 250 V AC	–	
Switching capacity presence	50 W / 50 VA (max. 2 A), min. 0,5 mV / 10 mA	–	
Size of concealed housing	Ø 55 mm (NIS, PMI)		
Ambient temperature	0 °C ... +50 °C		
Type of protection	IP 40 (when fitted)		

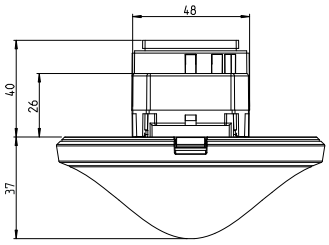
Detection range (Square)

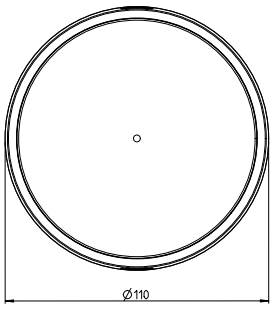
Mounting height (A)	Walking (T)	Sitting (S)
2 m	20 m² | 4,5 m x 4,5 m ± 0,5 m	9 m² | 3 m x 3 m
2,5 m	36 m² | 6 m x 6 m ± 0,5 m	16 m² | 4 m x 4 m
3 m	49 m² | 7 m x 7 m ± 1 m	25 m² | 5 m x 5 m
3,5 m	64 m² | 8 m x 8 m ± 1 m	-





Scale drawings





Accessories



theSenda P
↳ Art.No.: 9070910
Details page 281

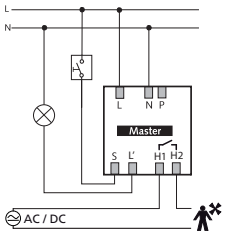
SendoPro 868-A
Details page 281

Surface frame 110A WH
Details page 281

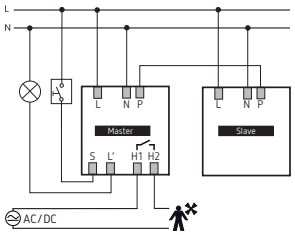
theSenda S
Details page 281

Ceiling installation box 73A
Details page 281

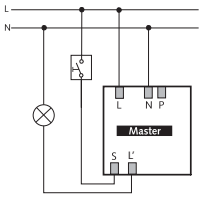
Connection diagrams



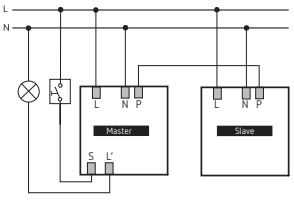
thePrema S360-101 E



thePrema S360-101 E,
thePrema S360 Slave E



thePrema S360-100 E



thePrema S360-100 E,
thePrema S360 Slave E

Presence detectors, 230 V AC



Description

thePrema P360-101 E

- Passive infrared presence detector for ceiling mounting
- Square detection area 360° (up to 100 m²) for reliable and easy planning
- Automatic presence- and brightness-dependent control for lighting and HVAC
- Mixed light measurement suitable for fluorescent lamps (FL/PL/ESL), halogen/incandescent lamps and LEDs
- Light measurement can be switched to spot or wide measurement
- Channel A, light: relay, 230 V
- Choice of fully or semi-automatic (absence detection) operation
- Adjustable brightness switching value, teach-in function
- Self-learning time delay
- Reduction of switch-off delay time in the event of short presence (brief-presence)
- Connection option for sensors or switches for manual switching with automatic recognition of sensor/switch
- Pulse function for staircase light time switch
- Channel H, presence: relay, floating e.g. for HVAC control
- Switch-on delay and switch-off delay configurable
- Room monitoring with selective movement detection
- Exceptionally easy configuration of the energy-saving behaviour with the new «eco plus» function
- Staircase time function
- Operating mode of light and presence relay can be flexibly selected using the remote control SendoPro
- User remote control theSenda S, management remote control SendoPro (optional)
- Ready for immediate use due to factory preset
- Test mode for checking function and detection area
- Extension of detection area via Master/Slave or Master/Master switching, a maximum of 10 detectors can be switched in parallel with each other
- Ceiling installation in flush-mounted socket
- Ceiling installation also possible with surface-mounted frame

thePrema P360 Slave E

- Slave version for thePrema
- Just to be used with thePrema as Master

* According to guarantee conditions, see www.theben.de/en/guarantee

Product selection

Installation type	Channel	Operating voltage	Colour	Type	Article number
Ceiling installation	Light | Presence	110–230 V AC	White	thePrema P360-101 E UP WH	2070105
			Grey	thePrema P360-101 E UP GR	2070106
			White	thePrema P360 Slave E UP WH	2070130
			Grey	thePrema P360 Slave E UP GR	2070131
			Additional colours available upon request		

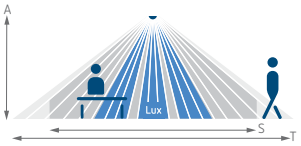
Technical data

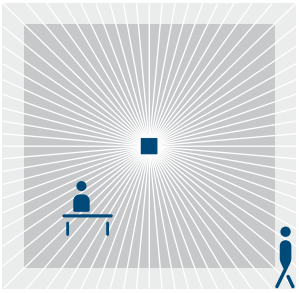
	thePrema P360-101 E UP	thePrema P360 Slave E UP
Operating voltage	110–230 V AC	
Frequency	50–60 Hz	
Installation height	2–10 m	
Power consumption	0,1 W	
Setting range brightness	Approx. 5–3000 lx/on	–
Light switch-off delay	Pulse (0,5 s), 10 s–60 min	–
Type of contact light	Relay 230 V/10 A µ-contact	–
Incandescent/halogen lamp load	2300 W	–
Compact and flourescent lamps	1150 VA (cos φ = 0,5)	–
Inrush current	max. 800 A/200 µs	–
Compact and flourescent lamps (max. number of electronic ballasts)	16 x 54/58 W, 24 x 35/36 W, 8 x 2 x 54/58 W, 12 x 2 x 35/36 W	–
LED lamp < 2 W	60 W	–
LED lamp 2–8 W	180 W	–
LED lamp > 8 W	200 W	–
Switch-on delay presence	0 s–10 min/Room surveillance	–
Presence switch-off delay	10 s–120 min	–

	thePrema P360-101 E UP	thePrema P360 Slave E UP
Type of contact presence	Relay potential-free, 220 V DC/250 V AC	–
Switching capacity presence	50 W/50 VA (max. 2 A), min. 0,5 mV/10 mA	–
Size of concealed housing	Ø 55 mm (NIS, PMI)	
Ambient temperature	0 °C ... +50 °C	
Type of protection	IP 40 (when fitted)	

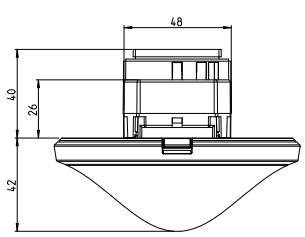
Detection range (Square)

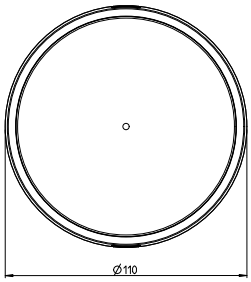
Mounting height (A)	Walking (T)	Sitting (S)
2 m	36 m² | 6 m x 6 m ± 0,5 m	20 m² | 4,5 m x 4,5 m
2,5 m	64 m² | 8 m x 8 m ± 0,5 m	36 m² | 6 m x 6 m
3 m	81 m² | 9 m x 9 m ± 1 m	49 m² | 7 m x 7 m
3,5 m	100 m² | 10 m x 10 m ± 1 m	64 m² | 8 m x 8 m
6 m	144 m² | 12 m x 12 m ± 1,5 m	–
10 m	400 m² | 20 m x 20 m ± 2 m	–
With a mounting height of more than 3.5 m walking motions are necessary and the detection areas of several detectors should overlap in the marginal zone. All figures are up to values. The detection range decreases with increasing temperatures.		





Scale drawings





Accessories



theSenda P
↳ Art.No.: 9070910
Details page 281

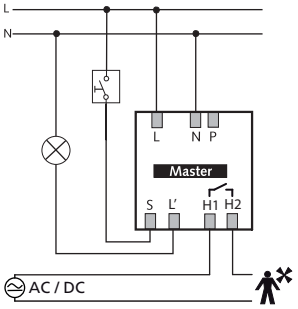
SendoPro 868-A
Details page 281

Surface frame 110A WH
Details page 281

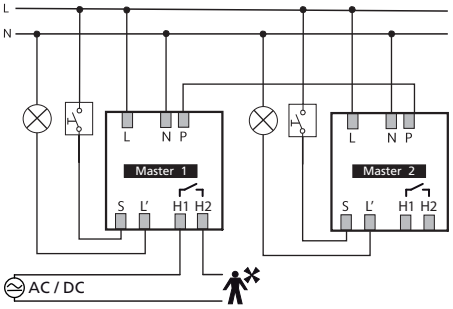
theSenda S
Details page 281

Ceiling installation box 73A
Details page 281

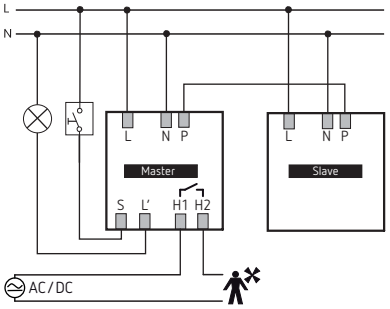
Connection diagrams



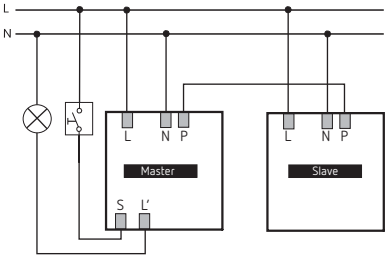
thePrema P360-101 E



thePrema P360-101 E



thePrema P360-101 E, thePrema P360 Slave E



thePrema P360-100 E, thePrema P360 Slave E

Presence and motion detectors

Presence detectors, 230 V AC



ECO-IR DUAL-C NT

Description

- Presence detector (PIR)
- Automatic control of 2 lighting groups depending on presence and brightness
- Square detection area allows accurate and simple planning
- 2 light switch outputs (relay, 230 V)
- Genuine daylight measurement, suitable only for fluorescent lamps (FL/PL/ESL)
- 2 brightness thresholds and self-learning switch-off delay adjustable
- Push button for manual control
- Inrush current limitation for EB
- Pulse function for staircase time switch
- Choice of fully or semi automatic operation: In „Semi-automatic" (absence detection) mode the light must be switched on manually and switches off automatically
- Parameters can be set using the potentiometers or via the optional service remote controls
- Optional user remote control
- Ready for use by ex-factory set items
- Test operation to check detection area and installation
- Master/master parallel switching: Up to ten detectors can be connected with each other to extend the detection area
- Ceiling mounting in flush-mounted box
- Possibility of surface mounting by using a surface frame

Product selection

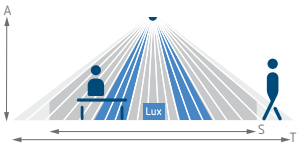
Installation type	Channel	Operating voltage	Colour	Type	Article number
Ceiling installation	2 x light	230 V AC	Pure white (similar to RAL 9010)	ECO-IR DUAL-C NT	2020401
			Black (similar to RAL 9005)	ECO-IR DUAL-C NT BK	2020815
			Silver (similar to RAL 9006)	ECO-IR DUAL-C NT SR	2020816
			Additional colours available upon request		

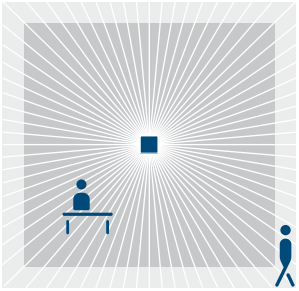
Technical data

	ECO-IR DUAL-C NT
Operating voltage	230 V AC
Frequency	50 Hz
Installation height	2 – 4 m
Power consumption	0,9 W
Setting range brightness	Approx. 10 – 1500 lx/on
Light switch-off delay	Pulse (0,5 s), 10 s – 20 min
Type of contact light	Relay 230 V, switch-on current limit
Compact and flourescent lamps	max. 1400 VA
Compact and flourescent lamps (max. number of electronic ballasts)	16 x (1 x 54/58 W), 8 x (2 x 54/58 W), 24 x (1 x 35/36 W), 12 x (2 x 35/36 W), 24 x (smaller than 35/36 W)
Size of concealed housing	Ø 55 mm (NIS, PMI)
Ambient temperature	0 °C ... +50 °C
Type of protection	IP 40 (when fitted)

Detection range (Square)

Mounting height (A)	Walking (T)	Sitting (S)
2 m	36 m² | 6 m x 6 m ± 0,5 m	20 m² | 4,5 m x 4,5 m
2,5 m	64 m² | 8 m x 8 m ± 0,5 m	36 m² | 6 m x 6 m
3 m	81 m² | 9 m x 9 m ± 0,5 m	49 m² | 7 m x 7 m
3,5 m	100 m² | 10 m x 10 m ± 1 m	64 m² | 8 m x 8 m
4 m	121 m² | 11 m x 11 m ± 1 m	–





Additional technical data at: www.theben.de/product/ Articlenumber

Accessories



Surface frame ECO-IR 360
↳ Art.No.: 9070512
Details page 281



SendoPro 868-A
↳ Art.No.: 9070675
Details page 283



clic
↳ Art.No.: 9070515
Details page 283

QuickFix concrete flush-mounted box
Details page 282

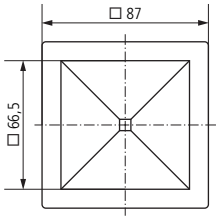
QuickFix flush-mounted housing
Details page 282

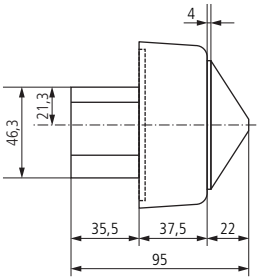
QuickSafe
Details page 282

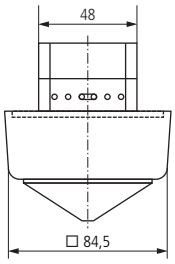
QuickFix round cover
Details page 282

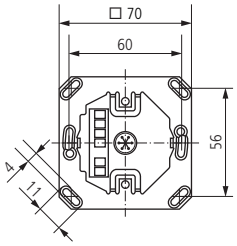
QuickFix square cover
Details page 282

Scale drawings

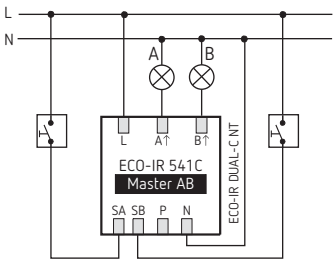


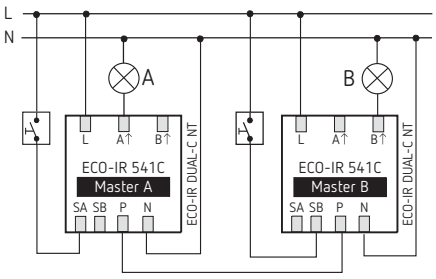


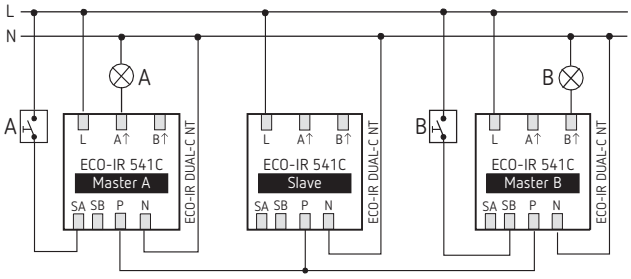




Connection diagrams







Presence detectors, 230 V AC



Description

- Presence detector (PIR)
- Automatic control of lighting depending on presence and brightness
- Flush design using concave mirror technology
- Square detection area for accurate and easy planning
- Light switch output (relay, 230 V)
- Mixed light measurement, suitable for fluorescent lamps (FL / PL / ESL), halogen / incandescent lamps and LEDs
- Brightness threshold and self-learning switch-off delay adjustable
- Push button or switch connection for manual control
- Pulse function for staircase time switch
- Choice of fully or semi automatic operation: In „Semi-automatic" (absence detection) mode the light must be switched on manually and switches off automatically
- Presence switch output (relay, potential-free) for example for HVAC control
- HVAC control with adjustable switch-on and switch-off delay
- Function „monitoring" with reduced sensitivity only to detect walking persons
- Ready for use by 6 predefined settings, details can be set using the optional service remote control SendoPro
- Parameters can be selected for subsequent changes
- Adjustable sensitivity
- Optional user remote control
- Test operation to check detection area, installation, brightness settings
- Master / slave or master / master parallel switching: Up to ten detectors can be connected with each other to extend the detection area
- Individual covers available upon request

PlanoCentro 101-EWH

- For ceiling installation (false ceilings)
- With installation for false ceilings and cover

PlanoCentro 000-EWH

- Slave-Version for PlanoCentro 101-EWH
- Just to be used with PlanoCentro 101-EWH as Master

PlanoCentro 101-UWH

- For flush-mounting (concrete ceiling)
- With metal installation frame for screwed fixing in wooden ceilings or in flush-mounted sockets, incl. cover

PlanoCentro 000-UWH

- Slave-Version for PlanoCentro 101-UWH
- Just to be used with PlanoCentro 101-UWH as Master

Product selection

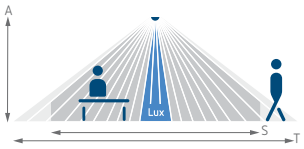
Installation type	Channel	Function	Colour	Type	Article number
Ceiling mounting with mounting frame	Light | Presence	Master	Pure white (similar to RAL 9010)	PlanoCentro 101-EWH	2030102
			Black (similar to RAL 9005)	PlanoCentro 101-EBK	2030103
			Silver (similar to RAL 9006)	PlanoCentro 101-ESR	2030104
	–	Slave	Pure white (similar to RAL 9010)	PlanoCentro 000-EWH	2040102
			Black (similar to RAL 9005)	PlanoCentro 000-EBK	2040103
			Silver (similar to RAL 9006)	PlanoCentro 000-ESR	2040104
Ceiling installation (flush-mounting concrete)	Light | Presence	Master	Pure white (similar to RAL 9010)	PlanoCentro 101-UWH	2030202
			Black (similar to RAL 9005)	PlanoCentro 101-UBK	2030203
			Silver (similar to RAL 9006)	PlanoCentro 101-USR	2030204
	–	Slave	Pure white (similar to RAL 9010)	PlanoCentro 000-UWH	2040202
			Black (similar to RAL 9005)	PlanoCentro 000-UBK	2040203
			Silver (similar to RAL 9006)	PlanoCentro 000-USR	2040204
			Additional colours available upon request		

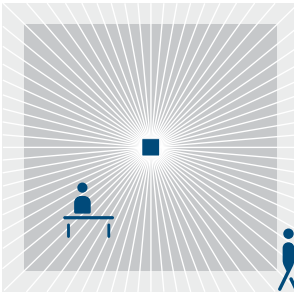
Technical data

	PlanoCentro 101	PlanoCentro 000
Operating voltage	230 V AC	
Frequency	50 Hz	
Installation height	2 – 3,5 m	
Power consumption	ca. 0,8 W	0,3 W
Setting range brightness	Approx. 5 – 2000 lx / on	–
Light switch-off delay	Pulse (0,5 s), 10 s – 60 min	–
Type of contact light	Relay 230 V / 10 A	–
Incandescent / halogen lamp load	2300 W	–
Compact and flourescent lamps	1150 VA (cos φ = 0,5)	–
Compact and flourescent lamps (max. number of electronic ballasts)	20 x 54 / 58 W, 25 x 35 / 36 W, 10 x 2 x 54 / 58 W, 15 x 2 x 35 / 36 W	–
LED lamp < 2 W	60 W	–
LED lamp 2 – 8 W	180 W	–
LED lamp > 8 W	200 W	–
Switch-on delay presence	0 s – 10 min	–
Presence switch-off delay	10 s – 120 min	–
Type of contact presence	Relay potential-free, 220 V DC / 250 V AC	–
Switching capacity presence	60 W (220 V DC), 62,5 VA (250 V AC), min. 0,5 mV / 10 mA	–
Ambient temperature	0 °C ... +50 °C	
Type of protection	IP 40 (when fitted)	

Detection range (Square)

Mounting height (A)	Walking (T)	Sitting (S)
2 m	36 m² | 6 m x 6 m ± 0,5 m	20 m² | 4,5 m x 4,5 m
2,5 m	64 m² | 8 m x 8 m ± 0,5 m	36 m² | 6 m x 6 m
3 m	81 m² | 9 m x 9 m ± 1 m	49 m² | 7 m x 7 m
3,5 m	100 m² | 10 m x 10 m ± 1 m	64 m² | 8 m x 8 m





Accessories



PlanoSets
for PlanoCentro-E
↳ Art.No.: 9070736
Details page 281



theSenda S
↳ Art.No.: 9070911
Details page 285



PlanoBox
for PlanoCentro-U
↳ Art.No.: 9070731
Details page 281

Junction casing, 115x115x100 mm
for PlanoCentro-U
Details page 281

SendoPro 868-A
Details page 283

QuickSafe
Details page 282

Presence and motion detectors

Presence detectors, 230 V AC



PlanoCentro

Description

- Presence detector (PIR)
- Automatic control of lighting depending on presence and brightness
- Flush design using concave mirror technology
- Square detection area for accurate and e asy planning
- Mixed light measurement, suitable for fluorescent lamps (FL/PL/ESL), halogen/ incandescent lamps and LEDs
- Brightness threshold and self-learning switch-off delay adjustable
- Push button or switch connection for manual control
- Pulse function for staircase time switch
- Choice of fully or semi automatic operation: In „Semi-automatic" (absence detection) mode the light must be switched on manu- ally and switches off automatically
- Ready for use by 6 predefined settings, details can be set using the optional service remote control SendoPro
- Parameters can be selected for subsequent changes
- Adjustable sensitivity
- Optional user remote control
- Test operation to check detection area, installation, brightness settings
- Master/slave or master/master paral- lel switching: Up to ten detectors can be connected with each other to extend the detection area
- Individual covers available upon request

PlanoCentro 201

- Channels A, B light: relay, 230V
- Zero cross switching
- Channel H, presence: relay, floating
- Switch-on delay and switch-off delay
- Room surveillance
- Detection area can be extended by using slave-version PlanoCentro 000
- For ceiling installation (false ceilings), with installation for false ceilings and cover (PlanoCentro 201-E)
- For flush-mounting (concrete ceiling), with metal installation frame for screwed fixing in wooden ceilings or in flush-mounted sockets, incl. cover (PlanoCentro 201)

PlanoCentro 300

- 3 light channels
- Ideal for classrooms with two lighting groups switched according to daylight each with their own light measurement as well as presence-dependent controlled blackboard lighting
- A, B, C channels light: relay, 230V
- Zero cross switching
- Detection area can be extended by using slave-version PlanoCentro 000
- For ceiling installation (false ceilings), with installation for false ceilings and cover (PlanoCentro 300-E)
- For flush-mounting (concrete ceiling), with metal installation frame for screwed fixing in wooden ceilings or in flush-mounted sockets, incl. cover (PlanoCentro 300-U)

Product selection

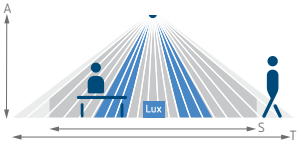
Installation type	Channel	Colour	Type	Article number
Ceiling mounting with mounting frame	3 x Light	Pure white (similar to RAL 9010)	PlanoCentro 300-EWH	2030302
		Black (similar to RAL 9005)	PlanoCentro 300-EBK	2030303
		Silver (similar to RAL 9006)	PlanoCentro 300-ESR	2030304
Ceiling installation (flush-mounting concrete)	3 x Light	Pure white (similar to RAL 9010)	PlanoCentro 300-UWH	2030402
		Black (similar to RAL 9005)	PlanoCentro 300-UBK	2030403
		Silver (similar to RAL 9006)	PlanoCentro 300-USR	2030404
Ceiling mounting with mounting frame	2 x Light | 1 x Presence	Pure white (similar to RAL 9010)	PlanoCentro 201-EWH	2030502
		Black (similar to RAL 9005)	PlanoCentro 201-EBK	2030503
		Silver (similar to RAL 9006)	PlanoCentro 201-ESR	2030504
Ceiling installation (flush-mounting concrete)	2 x Light | 1 x Presence	Pure white (similar to RAL 9010)	PlanoCentro 201-UWH	2030602
		Black (similar to RAL 9005)	PlanoCentro 201-UBK	2030603
		Silver (similar to RAL 9006)	PlanoCentro 201-USR	2030604
		Additional colours available upon request		

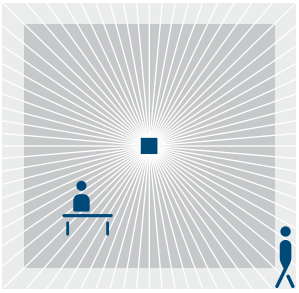
Technical data

	PlanoCentro 300	PlanoCentro 201
Operating voltage	230 V AC ± 10 %	
Frequency	50 Hz	
Installation height	2 – 3,5 m	
Power consumption	1 W	
Setting range brightness	Approx. 10 – 2000 lx / on	
Light switch-off delay	10 s – 60 min	
Type of contact light	Relay 230 V / 10 A	
Incandescent / halogen lamp load	2300 W, (total of all contacts)	
Compact and flourescent lamps	1150 VA (cos φ = 0,5)	
Compact and flourescent lamps (max. number of electronic ballasts)	20 x 54 / 58 W, 25 x 35 / 36 W, 10 x 2 x 54 / 58 W, 15 x 2 x 35 / 36 W	
LED lamp < 2 W	60 W	
LED lamp 2 – 8 W	180 W	
LED lamp > 8 W	200 W	
Switch-on delay presence	–	0 s – 10 min / Room surveillance
Presence switch-off delay	–	10 s – 120 min
Type of contact presence	–	Relay potential-free, 220 V DC / 250 V AC
Switching capacity presence	–	60 W (220 V DC), 62,5 VA (250 V AC), minimal 0,5 mV / 10mA
Ambient temperature	0 °C ... +50 °C	
Type of protection	IP 40 (when fitted)	

Detection range (Square)

Mounting height (A)	Walking (T)	Sitting (S)
2 m	36 m² | 6 m x 6 m ± 0,5 m	20 m² | 4,5 m x 4,5 m
2,5 m	64 m² | 8 m x 8 m ± 0,5 m	36 m² | 6 m x 6 m
3 m	81 m² | 9 m x 9 m ± 1 m	49 m² | 7 m x 7 m
3,5 m	100 m² | 10 m x 10 m ± 1 m	64 m² | 8 m x 8 m





Accessories



PlanoSets
for PlanoCentro-E
↳ Art.No.: 9070736
Details page 281



theSenda S
↳ Art.No.: 9070911
Details page 285



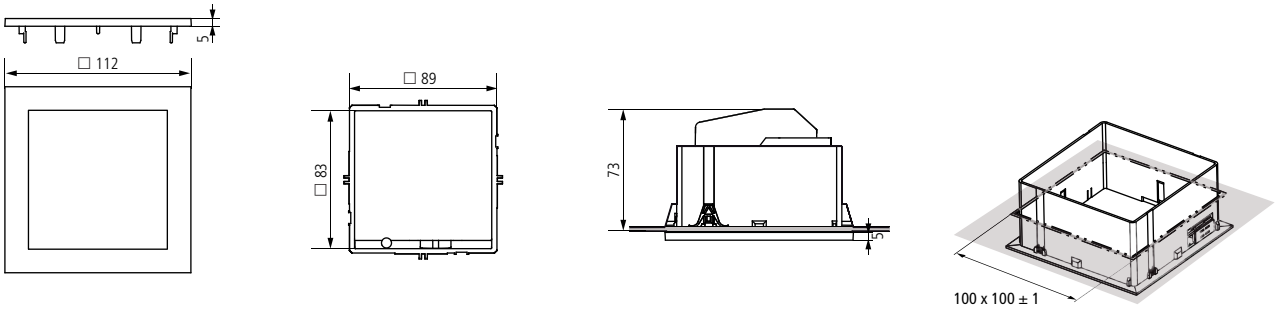
PlanoBox
for PlanoCentro-U
↳ Art.No.: 9070731
Details page 281

Junction casing, 115x115x100 mm
for PlanoCentro-U
Details page 281

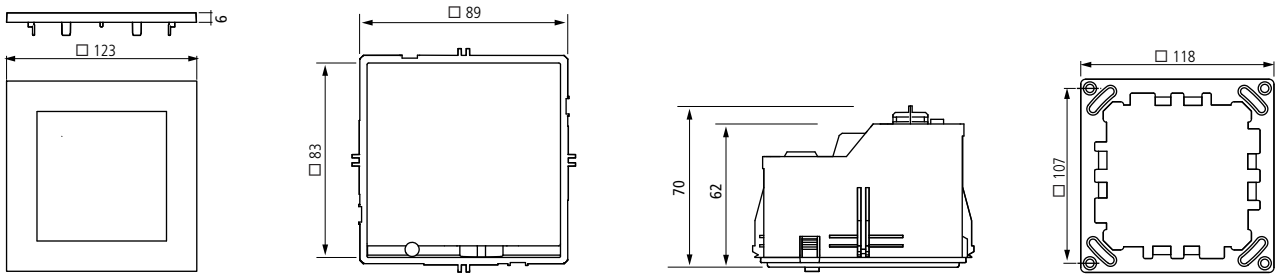
SendoPro 868-A
Details page 283

QuickSafe
Details page 282

Scale drawings

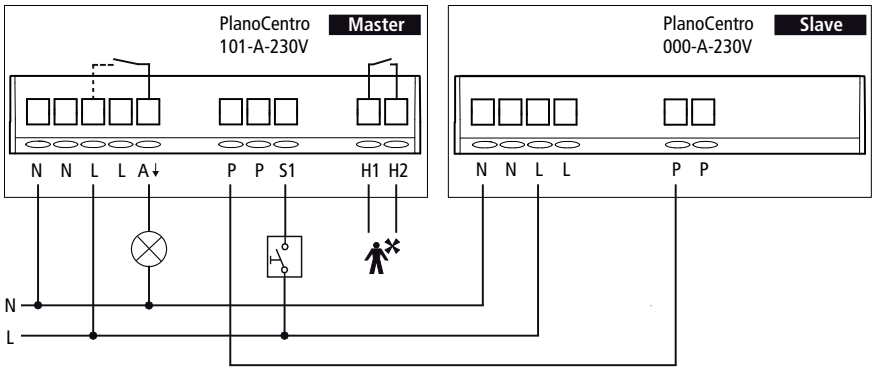


PlanoCentro E

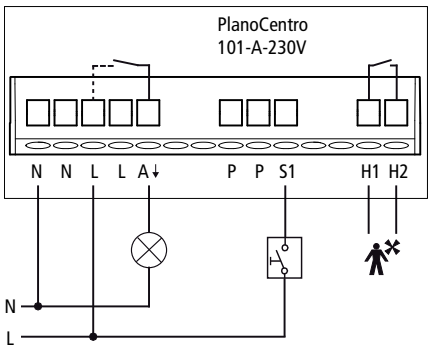


PlanoCentro U

Connection diagrams

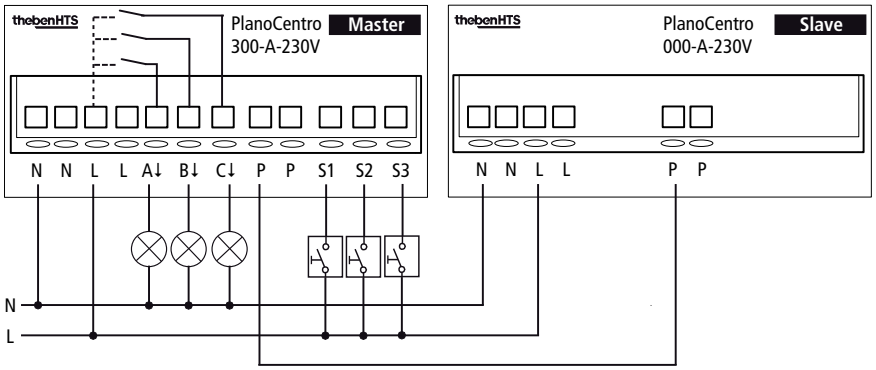


PlanoCentro 101

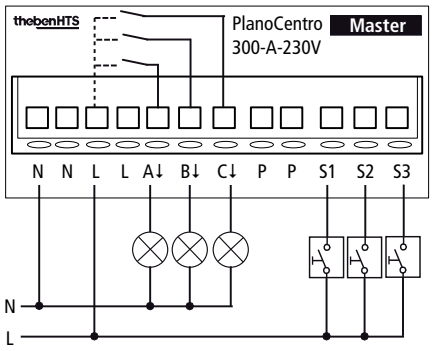


PlanoCentro 101

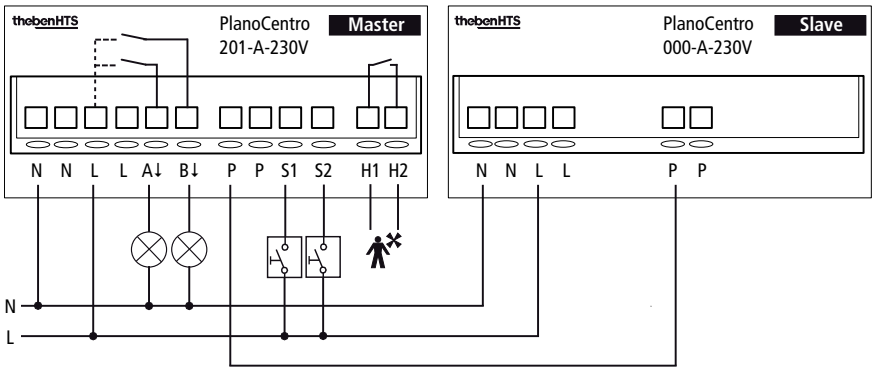
Connection diagrams



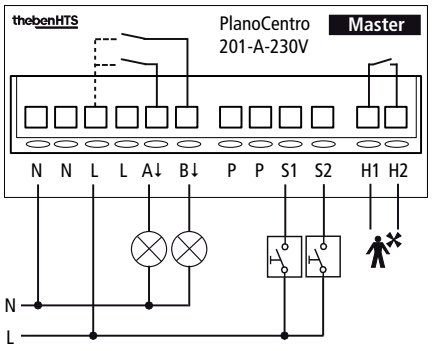
PlanoCentro 300



PlanoCentro 300



PlanoCentro 201



PlanoCentro 201

Presence and motion detectors

Presence detectors, 230 V AC



PresenceLight 180

Description

- Presence detector (PIR)
- Automatic control of lighting depending on presence and brightness
- IP 54 for versatile use
- Light switch output (relay, 230 V)
- Mixed light measurement, suitable for fluorescent lamps (FL/PL/ESL), halogen/incandescent lamps and LEDs
- Brightness threshold and self-learning switch-off delay adjustable
- Pulse function for staircase time switch
- Parameters can be set using the potentiometers or via the optional service remote controls
- Optional user remote control
- Ready for use by ex-factory set items
- Test operation to check detection area and installation
- Wall mounting in flush-mounted box
- Possibility of surface mounting by using a surface frame

Product selection

Installation type	Channel	Operating voltage	Colour	Type	Article number
Wall installation	Light	230 V AC	Pure white (similar to RAL 9010)	PresenceLight 180	2000050
			Black (similar to RAL 9005)	PresenceLight 180 BK	2000803
			Silver (similar to RAL 9006)	PresenceLight 180 SR	2000804
			Additional colours available upon request		

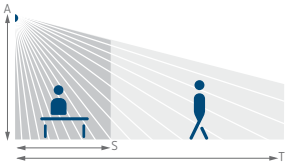
7

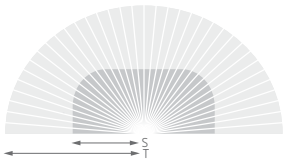
Technical data

	PresenceLight 180
Operating voltage	230 V AC
Frequency	50 Hz
Installation height	1,6 – 2,2 m
Power consumption	0,9 W
Setting range brightness	Approx. 10 – 1500 lx/on
Light switch-off delay	Pulse (0,5 s), 10 s – 20 min
Type of contact light	Relay 230 V
Resistive load	1400 W
Incandescent/halogen lamp load	1200 W
Compact and flourescent lamps	960 VA (cos φ = 0,8), 580 VA (cos φ = 0,5)
Compact and flourescent lamps (max. number of electronic ballasts)	10 x (1 x 54/58 W), 5 x (2 x 54/58 W), 16 x (1 x 35/36 W), 8 x (2 x 35/36 W), 16 x (smaller than 35/36 W)
LED lamp < 2 W	25 W
LED lamp 2 – 8 W	70 W
LED lamp > 8 W	80 W
Size of concealed housing	Ø 55 mm (NIS, PMI)
Ambient temperature	– 20 °C ... +50 °C
Type of protection	IP 54 (when fitted)

Detection range (Semicircular)

Mounting height (A)	Walking (T)	Sitting (S)
2,2 m	100 m² | 8 m	25 m² | 7 m x 3,5 m





Accessories



Surface frame PresenceLight
↳ Art.No.: 9070513
Details page 280



Ceiling installation box 73A
↳ Art.No.: 9070917
Details page 281



clic
↳ Art.No.: 9070515
Details page 283

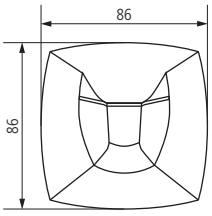


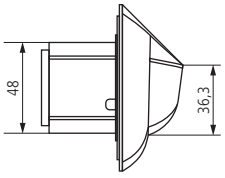
SendoPro 868-A
↳ Art.No.: 9070675
Details page 283

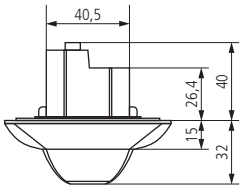


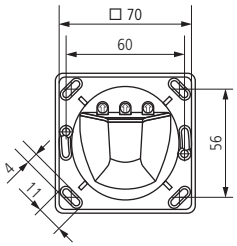
QuickSafe
↳ Art.No.: 9070531
Details page 282

Scale drawings

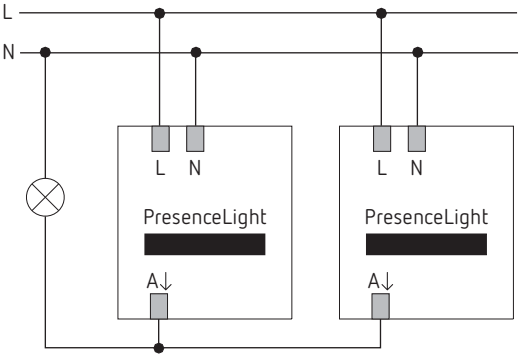


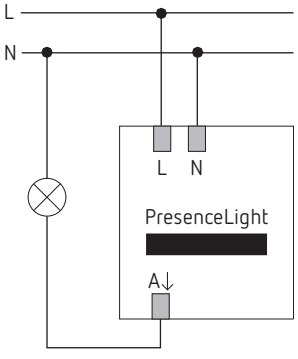






Connection diagrams





Presence and motion detectors

Presence detectors, 230 V AC



Description

- Presence detector (PIR)
- Automatic control of lighting depending on presence and brightness
- Light switch output (relay, 230 V)
- Genuine daylight measurement, suitable only for fluorescent lamps (FL/PL/ESL)
- Brightness threshold and self-learning switch-off delay adjustable
- Presence switch output (relay, potential-free) for example for HVAC control
- HVAC control with adjustable switch-on and switch-off delay
- Parameters can be set using the potentiometers
- Ready for use by ex-factory set items
- Wall mounting in flush-mounted box
- Possibility of surface mounting by using a surface frame

Product selection

Installation type	Channel	Operating voltage	Colour	Type	Article number
Wall installation	Light | Presence	230 V AC	Pure white (similar to RAL 9010)	ECO-IR 180A	2020050
			Black (similar to RAL 9005)	ECO-IR 180A BK	2020809
			Silver (similar to RAL 9006)	ECO-IR 180A SR	2020810
			Additional colours available upon request		

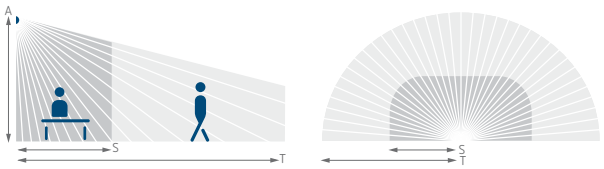
7

Technical data

	ECO-IR 180A
Operating voltage	230 V AC
Frequency	50 Hz
Installation height	1,6 – 2,2 m
Power consumption	0,9 W
Setting range brightness	Approx. 50 – 1600 lx/on
Light switch-off delay	2 min – 15 min
Type of contact light	Relay 230 V
Compact and flourescent lamps	max. 1400 VA
Compact and flourescent lamps (max. number of electronic ballasts)	12 x (1 x 54/58 W), 6 x (2 x 54/58 W), 18 x (1 x 35/36 W), 9 x (2 x 35/36 W), 18 x (smaller than 35/36 W)
Presence switch-off delay	10 – 60 min
Type of contact presence	Relay potential-free, 220 V DC/250 V AC
Switching capacity presence	100 W (24 V DC), 460 VA (230 V AC), µ, min. 1 V/1 mA
Size of concealed housing	Ø 55 mm (NIS, PMI)
Ambient temperature	0 °C ... +50 °C
Type of protection	IP 40 (when fitted)

Detection range (Semicircular)

Mounting height (A)	Walking (T)	Sitting (S)
2,2 m	100 m² | 8 m	32 m² | 8 m x 4 m



Accessories

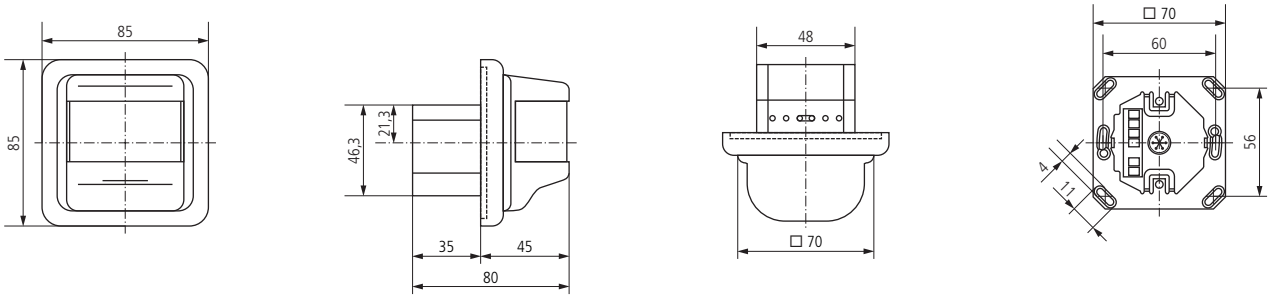


Surface frame ECO-IR 180
↳ Art.No.: 9070511
Details page 282

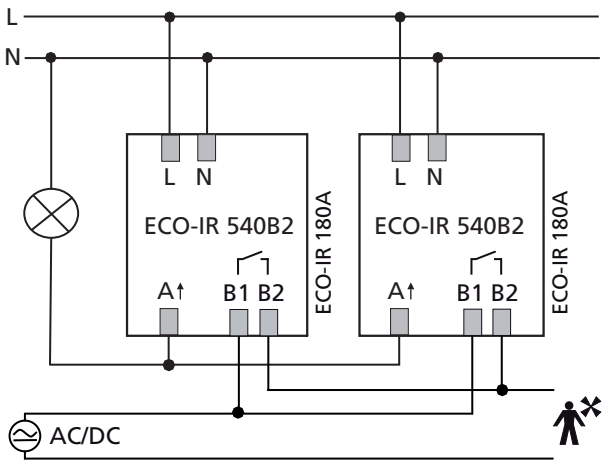


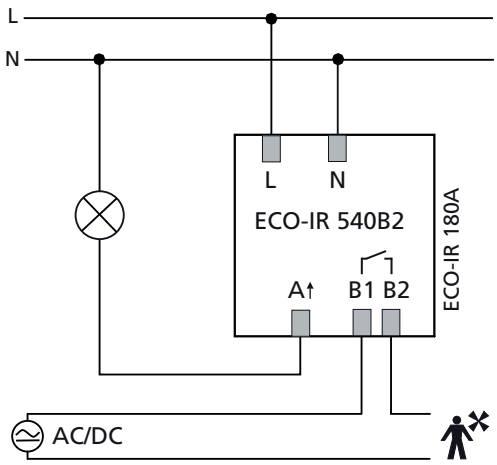
QuickSafe
↳ Art.No.: 9070531
Details page 282

Scale drawings



Connection diagrams





Presence and motion detectors

Presence detectors, 24 V AC / DC



Description

- Presence detector (PIR)
- Automatic control of lighting depending on presence and brightness
- Square detection area allows accurate and simple planning
- Light switch output (relay, potential-free)
- Mixed light measurement, suitable for fluorescent lamps (FL / PL / ESL), halogen / incandescent lamps and LEDs
- Brightness threshold and self-learning switch-off delay adjustable
- Pulse function for staircase time switch
- Presence switch output (relay, potential-free) for example for HVAC control
- HVAC control with adjustable switch-on and switch-off delay
- Function „monitoring" with reduced sensitivity only to detect walking persons
- Parameters can be set using the potentiometers or via the optional service remote controls
- Optional user remote control
- Ready for use by ex-factory set items
- Test operation to check detection area and installation
- Ceiling mounting in flush-mounted box
- Possibility of surface mounting by using a surface frame

Product selection

Installation type	Channel	Operating voltage	Colour	Type	Article number
Ceiling installation	Light | Presence	24 V AC / DC	Pure white (similar to RAL 9010)	compact office 24V	2014000
			Black (similar to RAL 9005)	compact office 24V BK	2014800
			Silver (similar to RAL 9006)	compact office 24V SR	2014801
			Additional colours available upon request		

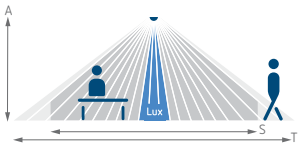
7

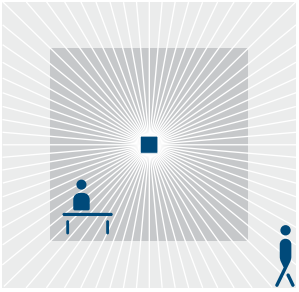
Technical data

	compact office 24V
Operating voltage	24 V AC / DC
Installation height	2 – 3,5 m
Power consumption	0,4 W
Setting range brightness	Approx. 10 – 1500 lx / on
Light switch-off delay	Pulse (0,5 s), 10 s – 20 min
Type of contact light	Relay potential-free
Switching contact light A	50 W (24 V AC / DC), 460 VA (230 V AC), µ, min. 1 V / 1 mA
Switch-on delay presence	0 s – 10 min
Presence switch-off delay	10 s – 120 min
Type of contact presence	Relay potential-free, 220 V DC / 250 V AC
Switching contact presence B	50 W (24 V AC / DC), 460 VA (230 V AC), µ, min. 1 V / 1 mA
Size of concealed housing	Ø 55 mm (NIS, PMI)
Ambient temperature	0 °C ... +50 °C
Type of protection	IP 40 (when fitted)

Detection range (Square)

Mounting height (A)	Walking (T)	Sitting (S)
2 m	20 m² | 4,5 m x 4,5 m ± 0,5 m	9 m² | 3 m x 3 m
2,5 m	36 m² | 6 m x 6 m ± 0,5 m	16 m² | 4 m x 4 m
3 m	49 m² | 7 m x 7 m ± 1 m	20 m² | 4,5 m x 4,5 m
3,5 m	64 m² | 8 m x 8 m ± 1 m	–





Accessories



Surface frame compact
↳ Art.No.: 9070514
Details page 280



SendoPro 868-A
↳ Art.No.: 9070675
Details page 283

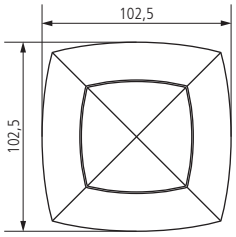


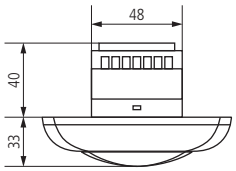
clic
↳ Art.No.: 9070515
Details page 283

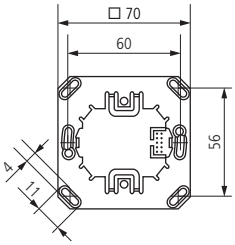
QuickSafe
Details page 282

Ceiling installation box 73A
Details page 281

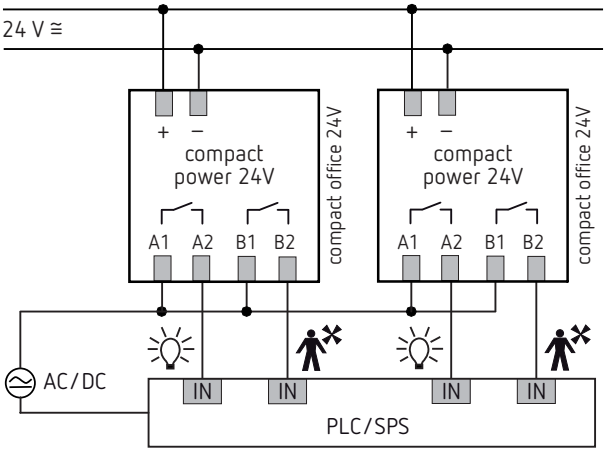
Scale drawings

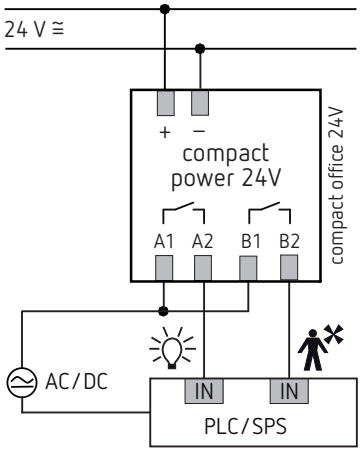






Connection diagrams





Presence and motion detectors

Presence detectors, 24 V AC / DC



compact office 24V Lux

Description

- Presence detector (PIR)
- Automatic control of lighting depending on presence and brightness and analogue value output of measured brightness
- Square detection area allows accurate and simple planning
- Light switch output (relay, potential-free)
- Mixed light measurement, suitable for fluorescent lamps (FL / PL / ESL), halogen / incandescent lamps and LEDs
- Brightness threshold and self-learning switch-off delay adjustable
- Analogue output 0 – 10 V for brightness
- Linear or logarithmic output of brightness
- Can be used as light sensor for PLC controls
- The analogue output exports the brightness measured by the internal sensor as an analogue signal. The output can be linear or logarithmic to the measured brightness. The output functions independently from the presence detector
- Pulse function for staircase time switch
- Parameters can be set using the potentiometers or via the optional service remote controls
- Optional user remote control
- Ready for use by ex-factory set items
- Test operation to check detection area and installation
- Ceiling mounting in flush-mounted box
- Possibility of surface mounting by using a surface frame

Product selection

Installation type	Channel	Operating voltage	Colour	Type	Article number
Ceiling installation	Light | 0 – 10 V	24 V AC / DC	Pure white (similar to RAL 9010)	compact office 24V Lux	2014001
			Black (similar to RAL 9005)	compact office 24V Lux BK	2014803
			Silver (similar to RAL 9006)	compact office 24V Lux SR	2014804
			Additional colours available upon request		

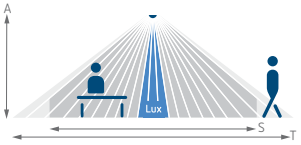
7

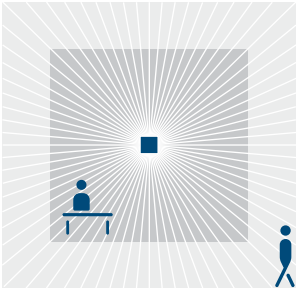
Technical data

	compact office 24V Lux
Operating voltage	24 V AC / DC
Installation height	2 – 3,5 m
Power consumption	0,5 W
Setting range brightness	Approx. 10 – 1500 lx / on
Light switch-off delay	Pulse (0,5 s), 10 s – 20 min
Type of contact light	Relay potential-free
Switching contact light A	50 W (24 V AC / DC), 460 VA (230 V AC), µ, min. 1 V / 1 mA
Size of concealed housing	Ø 55 mm (NIS, PMI)
Ambient temperature	0 °C ... +50 °C
Type of protection	IP 40 (when fitted)

Detection range (Square)

Mounting height (A)	Walking (T)	Sitting (S)
2 m	20 m² | 4,5 m x 4,5 m ± 0,5 m	9 m² | 3 m x 3 m
2,5 m	36 m² | 6 m x 6 m ± 0,5 m	16 m² | 4 m x 4 m
3 m	49 m² | 7 m x 7 m ± 1 m	20 m² | 4,5 m x 4,5 m
3,5 m	64 m² | 8 m x 8 m ± 1 m	–





Additional technical data at: www.theben.de / product / Articlenumber

Accessories



Surface frame compact
↳ Art.No.: 9070514
Details page 280



SendoPro 868-A
↳ Art.No.: 9070675
Details page 283

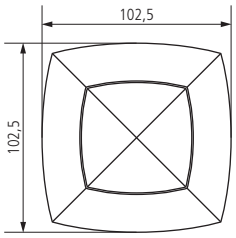


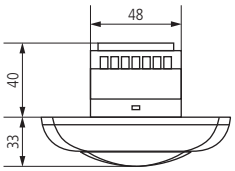
clic
↳ Art.No.: 9070515
Details page 283

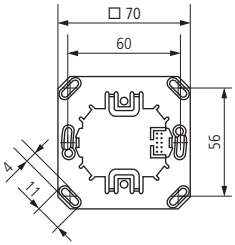
QuickSafe
Details page 282

Ceiling installation box 73A
Details page 281

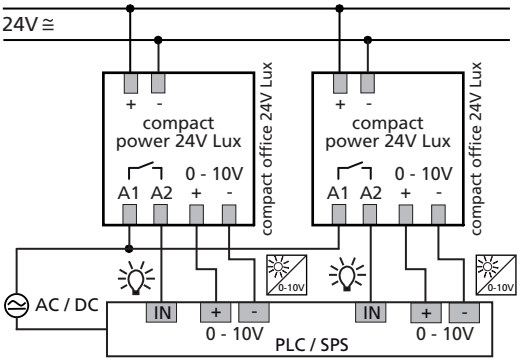
Scale drawings

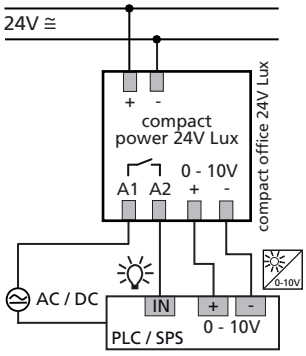






Connection diagrams





7

Presence and motion detectors

Presence detectors, 24 V AC / DC



Description

- Presence detector (PIR)
- Automatic control of lighting depending on presence and brightness
- Rectangular detection area for corridors allows accurate and simple planning
- Light switch output (relay, potential-free)
- Mixed light measurement, suitable for fluorescent lamps (FL / PL / ESL), halogen / incandescent lamps and LEDs
- Brightness threshold and self-learning switch-off delay adjustable
- Pulse function for staircase time switch
- Presence switch output (relay, potential-free) for example for HVAC control
- HVAC control with adjustable switch-on and switch-off delay
- Function „monitoring" with reduced sensitivity only to detect walking persons
- Parameters can be set using the potentiometers or via the optional service remote controls
- Optional user remote control
- Ready for use by ex-factory set items
- Test operation to check detection area and installation
- Ceiling mounting in flush-mounted box
- Possibility of surface mounting by using a surface frame

Product selection

Installation type	Channel	Operating voltage	Colour	Type	Article number
Ceiling installation	Light | Presence	24 V AC / DC	Pure white (similar to RAL 9010)	compact passage 24V	2014090
			Black (similar to RAL 9005)	compact passage 24V BK	2014806
			Silver (similar to RAL 9006)	compact passage 24V SR	2014807
			Additional colours available upon request		

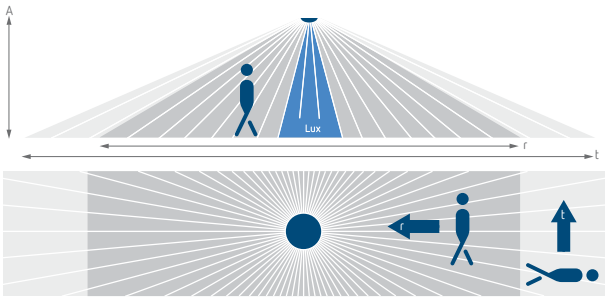
7

Technical data

	compact passage 24V
Operating voltage	24 V AC / DC
Installation height	2 – 6 m
Power consumption	0,4 W
Setting range brightness	Approx. 10 – 1500 lx / on
Light switch-off delay	Pulse (0,5 s), 10 s – 20 min
Type of contact light	Relay potential-free
Switching contact light A	50 W (24 V AC / DC), 460 VA (230 V AC), µ, min. 1 V / 1 mA
Switch-on delay presence	0 s – 10 min
Presence switch-off delay	10 s – 120 min
Type of contact presence	Relay potential-free, 220 V DC / 250 V AC
Switching contact presence B	50 W (24 V AC / DC), 460 VA (230 V AC), µ, min. 1 V / 1 mA
Size of concealed housing	Ø 55 mm (NIS, PMI)
Ambient temperature	0 °C ... +50 °C
Type of protection	IP 40 (when fitted)

Detection range (Rectangular)

Mounting height (A)	Head on to (r)	Diagonally (t)
2 m	56 m² | 16 m x 3,5 m ± 1,5 m	56 m² | 16 m x 3,5 m ± 1,5 m
2,5 m	72 m² | 18 m x 4 m ± 1,5 m	88 m² | 22 m x 4 m ± 1,5 m
3 m	90 m² | 20 m x 4,5 m ± 1,5 m	135 m² | 30 m x 4,5 m ± 1,5 m
3,5 m	100 m² | 20 m x 5 m ± 1,5 m	150 m² | 30 m x 5 m ± 1,5 m
4 m	100 m² | 20 m x 5 m ± 2 m	150 m² | 30 m x 5 m ± 2 m
4,5 m	100 m² | 20 m x 5 m ± 2 m	150 m² | 30 m x 5 m ± 2 m
5 m	100 m² | 20 m x 5 m ± 2,5 m	150 m² | 30 m x 5 m ± 2,5 m
6 m	100 m² | 20 m x 5 m ± 2,5 m	150 m² | 30 m x 5 m ± 2,5 m



Accessories



Surface frame compact
↳ Art.No.: 9070514
Details page 280



SendoPro 868-A
↳ Art.No.: 9070675
Details page 283

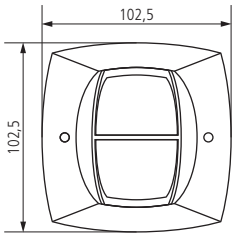


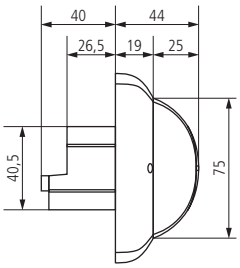
clic
↳ Art.No.: 9070515
Details page 283

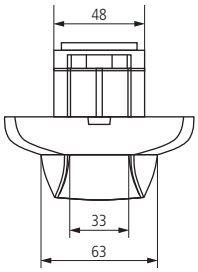
QuickSafe
Details page 282

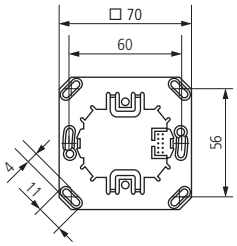
Ceiling installation box 73A
Details page 281

Scale drawings

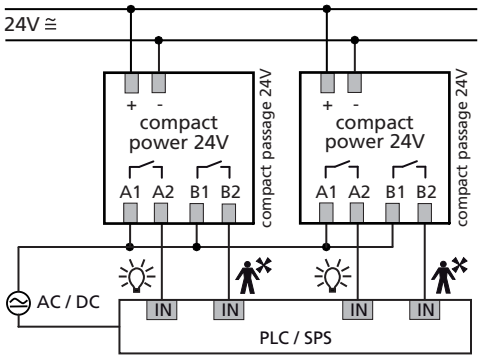


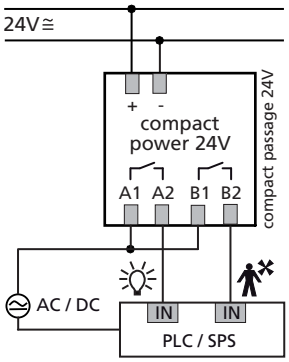






Connection diagrams





Presence and motion detectors

Presence detectors, 24 V AC / DC



Description

- Presence detector (PIR)
- Automatic control of lighting depending on presence and brightness
- Rectangular detection area for storage areas with clear demarcation vertically below the presence detector allows accurate and simple planning
- Light switch output (relay, potential-free)
- Mixed light measurement, suitable for fluorescent lamps (FL / PL / ESL), halogen / incandescent lamps and LEDs
- Brightness threshold and self-learning switch-off delay adjustable
- Pulse function for staircase time switch
- Presence switch output (relay, potential-free) for example for HVAC control
- HVAC control with adjustable switch-on and switch-off delay
- Function „monitoring" with reduced sensitivity only to detect walking persons
- Parameters can be set using the potentiometers or via the optional service remote controls
- Optional user remote control
- Ready for use by ex-factory set items
- Test operation to check detection area and installation
- Ceiling mounting in flush-mounted box
- Possibility of surface mounting by using a surface frame

Product selection

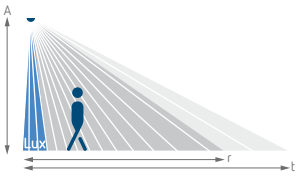
Installation type	Channel	Operating voltage	Colour	Type	Article number
Ceiling installation	Light | Presence	24 V AC / DC	Pure white (similar to RAL 9010)	compact passimo 24V WH	2014810
			Black (similar to RAL 9005)	compact passimo 24V BK	2014811
			Silver (similar to RAL 9006)	compact passimo 24V SR	2014812
			Additional colours available upon request		

Technical data

	compact passimo 24V
Operating voltage	24 V AC / DC
Installation height	2 – 6 m
Power consumption	0,4 W
Setting range brightness	Approx. 10 – 1500 lx / on
Light switch-off delay	Pulse (0,5 s), 10 s – 20 min
Type of contact light	Relay potential-free
Switching contact light A	50 W (24 V AC / DC), 460 VA (230 V AC), µ, min. 1 V / 1 mA
Switch-on delay presence	0 s – 10 min
Presence switch-off delay	10 s – 120 min
Type of contact presence	Relay potential-free, 220 V DC / 250 V AC
Switching contact presence B	50 W (24 V AC / DC), 460 VA (230 V AC), µ, min. 1 V / 1 mA
Size of concealed housing	Ø 55 mm (NIS, PMI)
Ambient temperature	0 °C ... +50 °C
Type of protection	IP 40 (when fitted)

Detection range (Rectangular)

Mounting height (A)	Diagonally (t)	Head on to (r)
2 m	28 m² | 8 m x 3,5 m ± 1,5 m	28 m² | 8 m x 3,5 m ± 1,5 m
2,5 m	44 m² | 11 m x 4 m ± 1,5 m	36 m² | 9 m x 4 m ± 1,5 m
3 m	68 m² | 15 m x 4,5 m ± 1,5 m	45 m² | 10 m x 4,5 m ± 1,5 m
3,5 m	75 m² | 15 m x 5 m ± 1,5 m	50 m² | 10 m x 5 m ± 1,5 m
4 m	75 m² | 15 m x 5 m ± 2 m	50 m² | 10 m x 5 m ± 2 m
4,5 m	75 m² | 15 m x 5 m ± 2 m	50 m² | 10 m x 5 m ± 2 m
5 m	75 m² | 15 m x 5 m ± 2,5 m	50 m² | 10 m x 5 m ± 2,5 m
6 m	75 m² | 15 m x 5 m ± 2,5 m	50 m² | 10 m x 5 m ± 2,5 m





Accessories



Surface frame compact
↳ Art.No.: 9070514
Details page 280



SendoPro 868-A
↳ Art.No.: 9070675
Details page 283

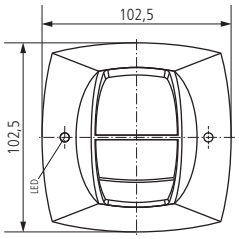


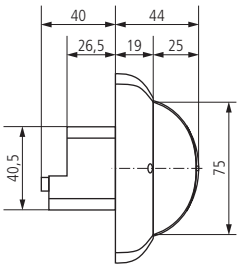
clic
↳ Art.No.: 9070515
Details page 283

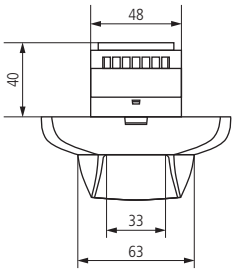
QuickSafe
Details page 282

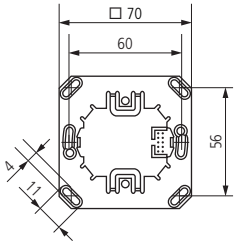
Ceiling installation box 73A
Details page 281

Scale drawings

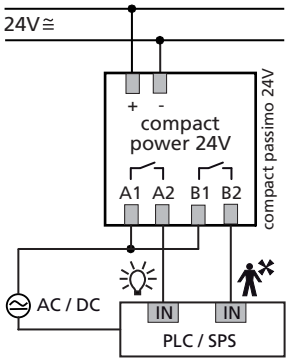


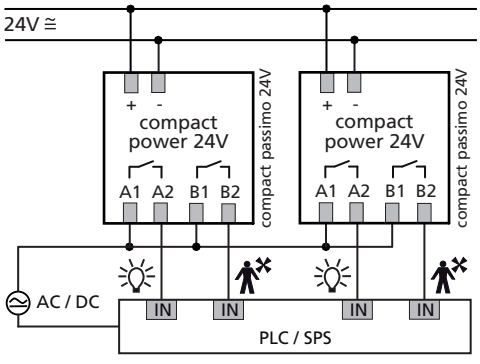






Connection diagrams





Presence and motion detectors

Presence detectors, 24 V AC / DC



Description

- Presence detector (PIR)
- Automatic control of lighting depending on presence and brightness
- Square detection area allows accurate and simple planning
- Light switch output (relay, potential-free)
- Genuine daylight measurement, suitable only for fluorescent lamps (FL / PL / ESL)
- Brightness threshold and self-learning switch-off delay adjustable
- Presence switch output (relay, potential-free) for example for HVAC control
- HVAC control with adjustable switch-on and switch-off delay
- Parameters can be set using the potentiometers
- Ready for use by ex-factory set items
- Ceiling mounting in flush-mounted box
- Possibility of surface mounting by using a surface frame

Product selection

Installation type	Channel	Operating voltage	Colour	Type	Article number
Ceiling installation	Light | Presence	24 V AC / DC	Pure white (similar to RAL 9010)	ECO-IR 360-24V	2024000
			Black (similar to RAL 9005)	ECO-IR 360-24V BK	2024800
			Silver (similar to RAL 9006)	ECO-IR 360-24V SR	2024801
			Additional colours available upon request		

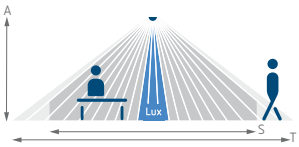
7

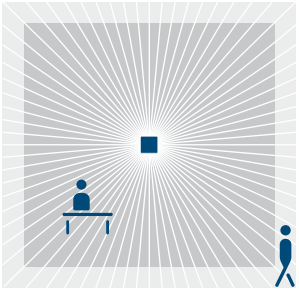
Technical data

	ECO-IR 360-24V
Operating voltage	24 V AC / DC
Installation height	2 – 4 m
Power consumption	0,3 W
Setting range brightness	Approx. 50 – 1600 lx / on
Light switch-off delay	2 min – 15 min
Type of contact light	Relay potential-free
Switching contact light A	50 W (24 V AC / DC), 460 VA (230 V AC), µ, min. 1 V / 1 mA
Presence switch-off delay	1 – 60 min
Type of contact presence	Relay potential-free, 220 V DC / 250 V AC
Switching contact presence B	50 W (24 V AC / DC), 460 VA (230 V AC), µ, min. 1 V / 1 mA
Size of concealed housing	Ø 55 mm (NIS, PMI)
Ambient temperature	0 °C ... +50 °C
Type of protection	IP 40 (when fitted)

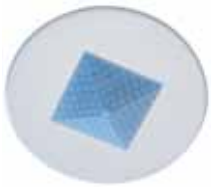
Detection range (Square)

Mounting height (A)	Walking (T)	Sitting (S)
2 m	36 m² | 6 m x 6 m ± 0,5 m	20 m² | 4,5 m x 4,5 m
2,5 m	64 m² | 8 m x 8 m ± 0,5 m	36 m² | 6 m x 6 m
3 m	81 m² | 9 m x 9 m ± 0,5 m	49 m² | 7 m x 7 m
3,5 m	100 m² | 10 m x 10 m ± 1 m	64 m² | 8 m x 8 m
4 m	121 m² | 11 m x 11 m ± 1 m	–

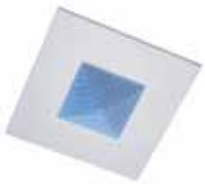




Accessories



QuickFix round cover
↳ Art.No.: 9070517
Details page 282



QuickFix square cover
↳ Art.No.: 9070516
Details page 282



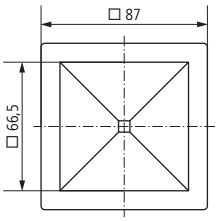
Surface frame ECO-IR 360
↳ Art.No.: 9070512
Details page 281

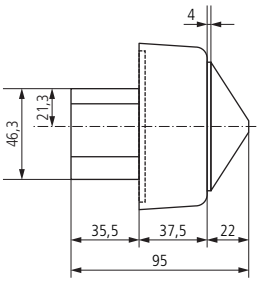
QuickFix concrete flush-mounted box
Details page 282

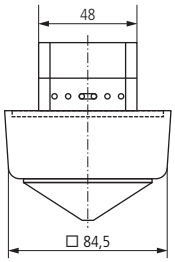
QuickFix flush-mounted housing
Details page 282

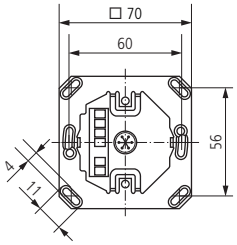
QuickSafe
Details page 282

Scale drawings

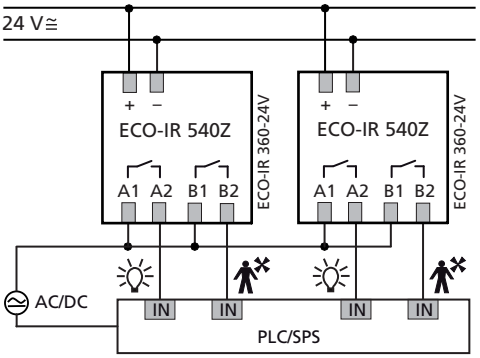




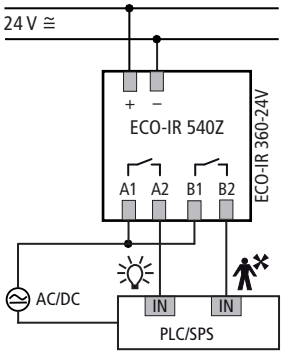




Connection diagrams



ECO-IR 360-24V



ECO-IR 360-24V

Presence and motion detectors

Presence detectors, 24 V AC / DC



Description

- Presence detector (PIR)
- Automatic control of lighting depending on presence and brightness
- Light switch output (relay, potential-free)
- Genuine daylight measurement, suitable only for fluorescent lamps (FL / PL / ESL)
- Brightness threshold and self-learning switch-off delay adjustable
- Presence switch output (relay, potential-free) for example for HVAC control
- HVAC control with adjustable switch-on and switch-off delay
- Parameters can be set using the potentiometers
- Ready for use by ex-factory set items
- Wall mounting in flush-mounted box
- Possibility of surface mounting by using a surface frame

Product selection

Installation type	Channel	Operating voltage	Colour	Type	Article number
Wall installation	Light | Presence	24 V AC / DC	Pure white (similar to RAL 9010)	ECO-IR 180-24V	2024050
			Black (similar to RAL 9005)	ECO-IR 180-24V BK	2024803
			Silver (similar to RAL 9006)	ECO-IR 180-24V SR	2024804
			Additional colours available upon request		

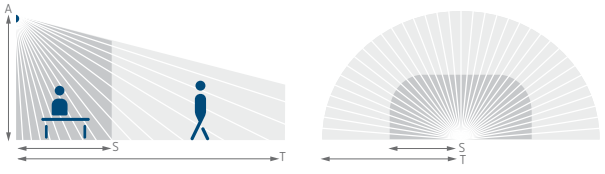
7

Technical data

	ECO-IR 180-24V
Operating voltage	24 V AC / DC
Installation height	1,6 – 2,2 m
Power consumption	0,3 W
Setting range brightness	Approx. 50 – 1600 lx / on
Light switch-off delay	2 min – 15 min
Type of contact light	Relay potential-free
Switching contact light A	50 W (24 V AC / DC), 460 VA (230 V AC), µ, min. 1 V / 1 mA
Presence switch-off delay	10 – 60 min
Type of contact presence	Relay potential-free, 220 V DC / 250 V AC
Switching contact presence B	50 W (24 V AC / DC), 460 VA (230 V AC), µ, min. 1 V / 1 mA
Size of concealed housing	Ø 55 mm (NIS, PMI)
Ambient temperature	0 °C ... +50 °C
Type of protection	IP 40 (when fitted)

Detection range (Semicircular)

Mounting height (A)	Walking (T)	Sitting (S)
2,2 m	100 m² | 8 m	32 m² | 8 m x 4 m



Additional technical data at: www.theben.de / product / Articlenumber

Accessories

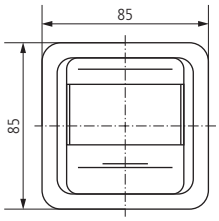


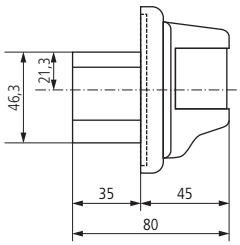
Surface frame ECO-IR 180
↳ Art.No.: 9070511
Details page 282

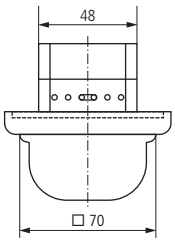


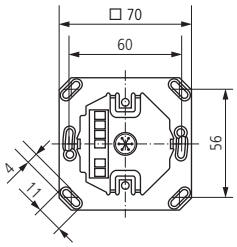
QuickSafe
↳ Art.No.: 9070531
Details page 282

Scale drawings

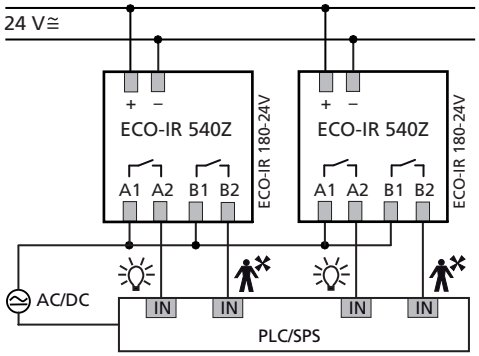


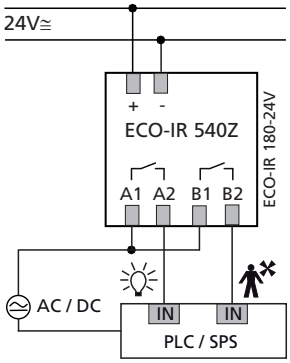


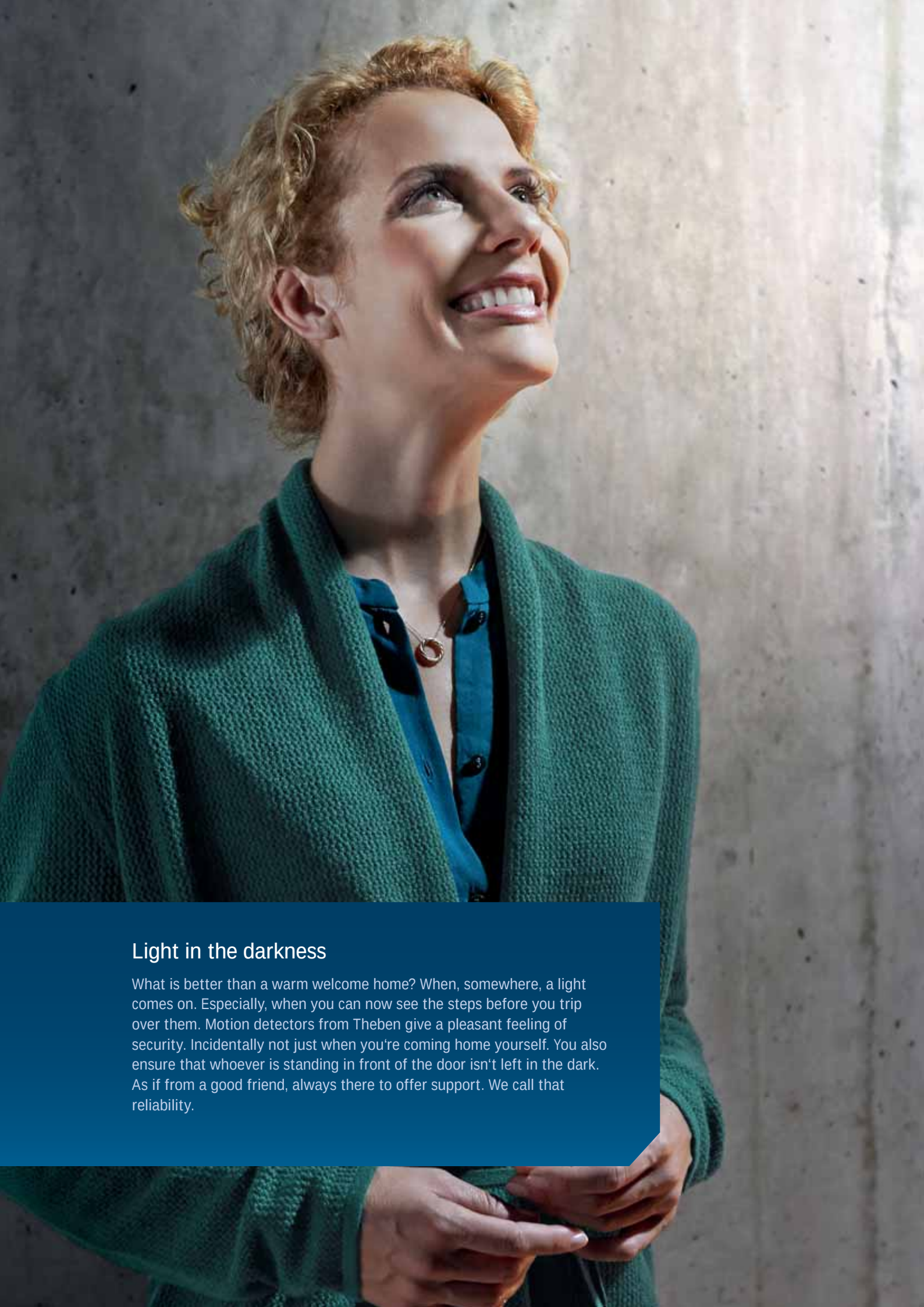




Connection diagrams







Light in the darkness

What is better than a warm welcome home? When, somewhere, a light comes on. Especially, when you can now see the steps before you trip over them. Motion detectors from Theben give a pleasant feeling of security. Incidentally not just when you're coming home yourself. You also ensure that whoever is standing in front of the door isn't left in the dark. As if from a good friend, always there to offer support. We call that reliability.

	Installation type	Detection angle	Detection range	Channel	Lamp loads	Light switch-off delay	Remote controlled	Type	Page
Outdoor									
	Wall installation	150°	12 m	Light	2300 W	1 s – 20 min	–	theLuxa S150	132
		180°	12 m	Light	2300 W	1 s – 20 min	–	theLuxa S180	132
	Wall and ceiling installation	360°	Ø 32 m	Light	2300 W	1 s – 20 min	–	theLuxa S360	134
		220°	16 m	Light	2300 W	1 s – 20 min	√	theLuxa P220	136
		300°	16 m	Light	2300 W	1 s – 20 min	√	theLuxa P300	136
Outdoor with spotlight									
	Wall installation	180°	12 m	–	–	5 s – 10 min	–	theLeda E10	138
								theLeda E20	138
				Light	1000 W	5 s – 10 min	–	theLeda E30	138
		–	–	–	–	–	–	theLeda E10L	140
								theLeda E20L	140
								theLeda E30L	140
		140° / 90°	10 m	–	–	5 s – 10 min	–	LUXA 102-140 LED 8W	142
								LUXA 102-140 LED 16W	142
		180°	12 m	Light	–	5 s – 10 min	–	LUXA 102-180 LED 32W	144
		–	–	–	–	–	–	LUXA 102 FL LED 8W	146
								LUXA 102 FL LED 16W	146
								LUXA 102 FL LED 32W	146
		150°	12 m	–	–	5 s – 12 min	–	LUXA 102-150 / 150W	148
								LUXA 102-150 / 500W	148
Indoor									
	Ceiling installation, Suface mounted	360°	Ø 8 m	Light	2300 W	10 s – 60 min	√	theMova S360-100 DE	150
				Light | Presence	2300 W	10 s – 60 min	√	theMova S360-101 DE	150
	Ceiling mounting	360°	Ø 8 m	Light	2300 W	10 s – 60 min	√	theMova S360-100 AP	152
				Light | Presence	2300 W	10 s – 60 min	√	theMova S360-101 AP	152
	Ceiling installation	360°	Ø 24 m	Light	2300 W	10 s – 60 min	√	theMova P360-100 UP	154
	Flush-mounted wall installation	200°, circular	Ø 7 m	Light	1000 W	20 s – 30 min	–	LUXA 103-200	156
					400 W	20 s – 30 min	–	LUXA 103-200 T	156

8



Description

Common functions

- Motion detector (PIR)
- Automatic lighting control based on presence and brightness
- For outdoor use
- Additional creep under protection
- Sensor head can be turned by ± 90° horizontally and by 30° downwards
- Adjustable brightness switching value and switch-off delay
- Mixed light measurement suitable for the control of fluorescent, incandescent, halogen lamps and LEDs
- Zero-cross switching for relay-saving switching and high lamp loads
- Teach-in of current brightness value possible
- Pulse function
- Test function for checking detection area
- Installation on flush-mounted socket possible (60 mm)
- Single-handed plug-in installation
- Instant start-up possible via factory preset
- Controls are place protected
- Terminal for protective earth conductor

theLuxa S150

- Detection angle 150°

theLuxa S180

- Detection angle 180°

8

Product selection

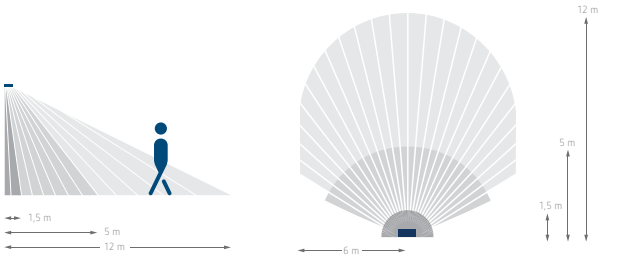
Installation type	Channel	Detection angle	Colour	Type	Article number
Wall installation	Light	150°	White	theLuxa S150 WH	1010500
			Black	theLuxa S150 BK	1010501
		180°	White	theLuxa S180 WH	1010505
			Black	theLuxa S180 BK	1010506

Technical data

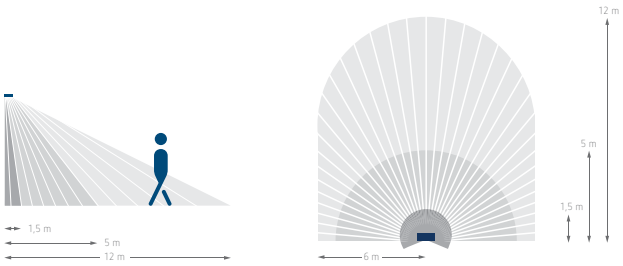
	theLuxa S150	theLuxa S180
Operating voltage	230 V AC	
Frequency	50 Hz	
Stand-by consumption	0,9 W	
Setting range brightness	5 – 1000 lx	
Switching capacity light	10 A (at 230 V AC, cos φ = 1), 6 A (at 230 V AC, cos φ = 0.6), 3 AX (at 230 V AC, cos φ = 0.3)	
Detection angle	150°	180°
Light switch-off delay	1 s – 20 min	
Incandescent lamp load	2300 W	
Fluorescent lamp load (conventional) not corrected	400 VA	
Fluorescent lamp load (conventional) parallel-corrected	400 VA, 42 µF	
Fluorescent lamp load (conventional) series-corrected	400 VA	
Energy saving lamps	150 W	
LED lamp < 2 W	25 W	
LED lamp 2 – 8 W	90 W	

	theLuxa S150	theLuxa S180
LED lamp > 8 W	100 W	
Ambient temperature	–25 °C ... +45 °C	
Protection class	II	
Type of protection	IP 55	

Detection range (Semicircular)



theLuxa S150



theLuxa S180

Mounting height	Walking head on to	Walking diagonally
2 m	3 m	9 m
2,5 m	5 m	12 m
3 m	5 m	12 m
3,5 m	5 m	12 m
4 m	3 m	9 m

Walking diagonally to the detector
Walking head on to the detector
Creep under protection
Mounting height: 2.5 m

Accessories



Corner angle theLuxa S WH
for theLuxa S150/180
↳ Art.No.: 9070902
Details page 284



Spacer theLuxa S WH
for theLuxa S150/180
↳ Art.No.: 9070906
Details page 283

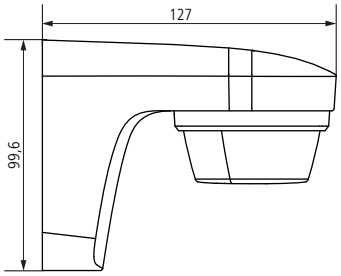


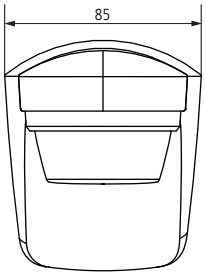
Corner angle theLuxa S BK
for theLuxa S150/180
↳ Art.No.: 9070903
Details page 284



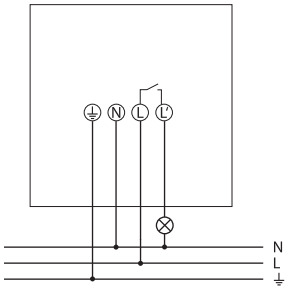
Spacer theLuxa S BK
for theLuxa S150/180
↳ Art.No.: 9070907
Details page 283

Scale drawings





Connection diagrams





Description

Common functions

- Motion detector (PIR)
- Automatic lighting control based on presence and brightness
- For outdoor use
- For installation on walls and ceilings
- 360° detection angle
- Sensor head can be turned by ± 90° horizontally, by 45° downwards and by 90° upwards
- Adjustable brightness switching value and switch-off delay
- Sensitivity can be reduced to limit detection area
- Area limit via lens attachment
- Mixed light measurement suitable for the control of fluorescent, incandescent, halogen lamps and LEDs
- Zero-cross switching for relay-saving switching and high lamp loads
- Teach-in of current brightness value possible
- Pulse function
- Test function for checking detection area
- Installation on flush-mounted socket possible (60 mm)
- Single-handed plug-in installation
- Instant start-up possible via factory preset
- Controls are place protected
- Terminal for protective earth conductor

Product selection

Installation type	Channel	Detection angle	Colour	Type	Article number
Wall and ceiling installation	Light	360°	White	theLuxa S360 WH	1010510
			Black	theLuxa S360 BK	1010511

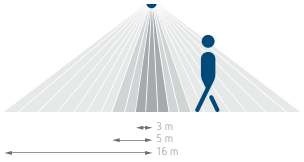
Technical data

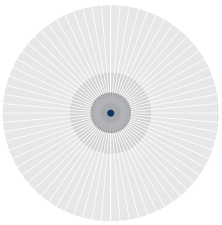
	theLuxa S360
Operating voltage	230 V AC
Frequency	50 Hz
Stand-by consumption	0,5 W
Setting range brightness	5 – 1000 lx
Switching capacity light	10 A (at 230 V AC, cos φ = 1), 6 A (at 230 V AC, cos φ = 0.6), 3 AX (at 230 V AC, cos φ = 0.3)
Detection angle	360°
Light switch-off delay	1 s – 20 min
Incandescent lamp load	2300 W
Fluorescent lamp load (conventional) not corrected	400 VA
Fluorescent lamp load (conventional) parallel-corrected	400 VA, 42 µF
Fluorescent lamp load (conventional) series-corrected	400 VA
Energy saving lamps	150 W
LED lamp < 2 W	25 W
LED lamp 2 – 8 W	90 W
LED lamp > 8 W	100 W

	theLuxa S360
Ambient temperature	– 25 °C ... +45 °C
Protection class	II
Type of protection	IP 55

Detection range (Round)

Mounting height	Walking head on to	Walking diagonally
2 m	4 m	15 m
2,5 m	5 m	16 m
3 m	5 m	16 m
3,5 m	5 m	10 m
4 m	3 m	8 m





Walking diagonally to the detector
Walking head on to the detector
Creep under protection
Mounting height: 2.5 m

Accessories



Corner angle theLuxa S WH
for theLuxa S360
↳ Art.No.: 9070902
Details page 284



Spacer theLuxa S WH
for theLuxa S360
↳ Art.No.: 9070906
Details page 283

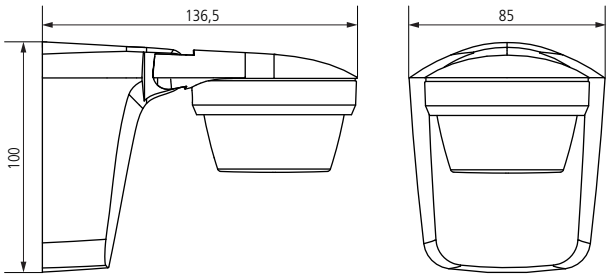


Corner angle theLuxa S BK
for theLuxa S360
↳ Art.No.: 9070903
Details page 284

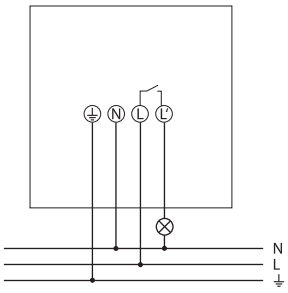


Spacer theLuxa S BK
for theLuxa S360
↳ Art.No.: 9070907
Details page 283

Scale drawings



Connection diagrams





Description

Common functions

- Motion detector (PIR)
- Automatic lighting control based on presence and brightness
- For outdoor use
- For installation on walls and ceilings
- Additional creep under protection
- For larger, commercial outdoors properties such as offices, public buildings, hotels, schools, car parks and warehouses
- Adjustable brightness switching value and switch-off delay
- Sensor head can be turned by ± 90° horizontally, by 45° downwards and by 90° upwards
- Remote-controllable
- Sensitivity can be reduced to limit detection area
- Area limit via lens attachment
- Mixed light measurement suitable for the control of fluorescent, incandescent, halogen lamps and LEDs
- Potential-free relay with tungsten pre-contact for relay-saving switching and high lamp loads
- Teach-in of current brightness value possible
- Pulse function
- Test function for checking detection area
- Installation on flush-mounted socket possible (60 mm)
- Single-handed plug-in installation
- Instant start-up possible via factory preset
- Controls are place protected
- Terminal for protective earth conductor
- Spacer included in delievery

theLuxa P220

- Detection angle 220°

theLuxa P300

- Detection angle 200°
- Corner angle included in delivery

8

Product selection

Installation type	Channel	Detection angle	Colour	Type	Article number
Wall and ceiling installation	Light	220°	White	theLuxa P220 WH	1010605
			Black	theLuxa P220 BK	1010606
		300°	White	theLuxa P300 WH	1010610
			Black	theLuxa P300 BK	1010611

Technical data

	theLuxa P220	theLuxa P300
Operating voltage	230 V AC	
Frequency	50 Hz	
Stand-by consumption	0,3 W	
Setting range brightness	5 – 1000 lx	
Switching capacity light	10 A (at 230 V AC, cos φ = 1), 10 AX (at 230 V AC, cos φ = 0.3)	
Detection angle	220°	300°
Light switch-off delay	1 s – 20 min	
Incandescent lamp load	2300 W	
Fluorescent lamp load (conventional) parallel-corrected	1300 VA, 140 µF	
Energy saving lamps	300 W	
LED lamp < 2 W	60 W	
LED lamp 2 – 8 W	180 W	
LED lamp > 8 W	200 W	

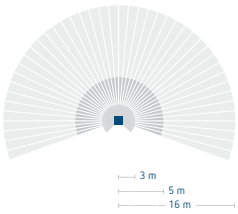
	theLuxa P220	theLuxa P300
Ambient temperature	–25 °C ... +45 °C	
Protection class	II	
Type of protection	IP 55	

Detection range (Semicircular)

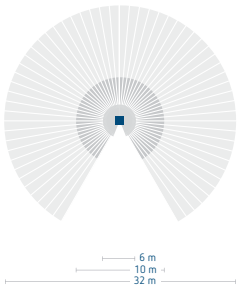
Mounting height	Walking head on to	Walking diagonally
2 m	4 m	12 m
2,5 m	5 m	16 m
3 m	5 m	16 m
3,5 m	5 m	16 m
4 m	4 m	12 m

- Walking diagonally to the detector
- Walking head on to the detector
- Creep under protection

Mounting height: 2.5 m



theLuxa P220



theLuxa P300

Accessories



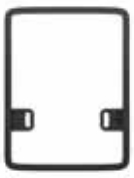
Corner angle theLuxa P WH
for theLuxa P220, theLuxa P300
↳ Art.No.: 9070904
Details page 284



Corner angle theLuxa P BK
for theLuxa P220, theLuxa P300
↳ Art.No.: 9070905
Details page 284



Spacer theLuxa P WH
for theLuxa P220, theLuxa P300
↳ Art.No.: 9070908
Details page 283



Spacer theLuxa P BK
for theLuxa P220, theLuxa P300
↳ Art.No.: 9070909
Details page 283

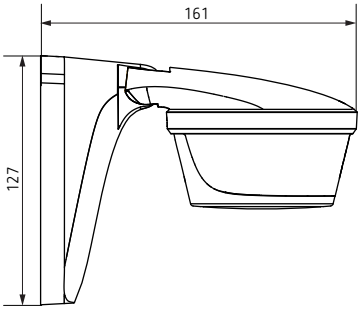


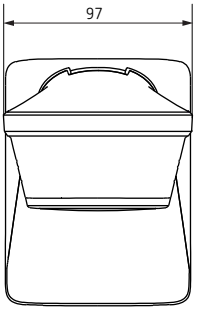
theSenda P
↳ Art.No.: 9070910
Details page 285



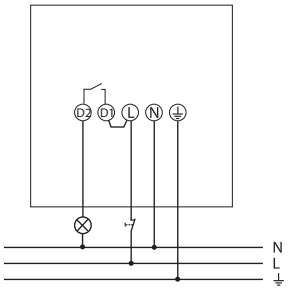
theSenda S
↳ Art.No.: 9070911
Details page 285

Scale drawings





Connection diagrams





Description

Common functions

- LED spotlight with motion detector
- Suitable for outdoor use
- Automatic lighting control based on presence and brightness
- 180° detection angle at a detection range of 12 m
- Sensor head can be turned by ± 90° horizontally and 90° downwards
- Spotlight can be swivelled 45° downwards and 90° upwards
- Area limit via lens attachment
- Instant start-up possible via factory preset
- Adjustable lux value and switch-off delay
- Settings can be changed without tools
- Optional purely twilight-dependent control
- Not suitable for dimming application

theLeda E10

- 1 LED spot with 10 W

theLeda E20

- 1 LED spot with 20 W

theLeda E30

- 1 LED spot with 30 W
- Additional light switch output / relay 230 V AC

8

Product selection

Installation type	Detection angle	LED	Colour	Type	Article number
Wall installation	180°	10 W	White	theLeda E10 WH	1020911
			Black	theLeda E10 BK	1020912
		20 W	White	theLeda E20 WH	1020913
			Black	theLeda E20 BK	1020914
		30 W	White	theLeda E30 WH	1020915
			Black	theLeda E30 BK	1020916

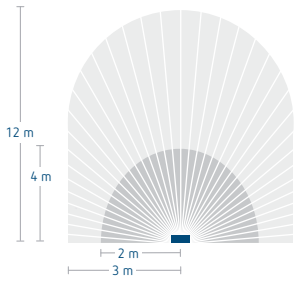
Technical data

	theLeda E10		theLeda E20		theLeda E30	
Operating voltage	230 V AC					
Frequency	50 – 60 Hz					
Stand-by consumption	0,5 W					
Setting range brightness	2 – 200 lx					
LED output (lighting current)	750 lm	685 lm	1325 lm	1260 lm	2310 lm	2115 lm
Colour temperature	5000 – 5600 K					
Detection angle	180°					
Switching output	–				Not potential-free (230 V)	
Light switch-off delay	5 s – 10 min					
Incandescent / halogen lamp load	–				1000 W	

Additional technical data at: www.theben.de / product / Articlenumber

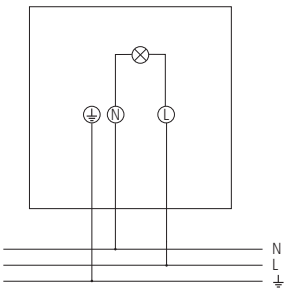
	theLeda E10	theLeda E20	theLeda E30
LED lamp < 2 W	–		15 W
LED lamp 2 – 8 W	–		50 W
LED lamp > 8 W	–		50 W
Ambient temperature	–20 °C ... +40 °C		
Protection class	I		
Type of protection	IP 55		

Detection range (Semicircular)

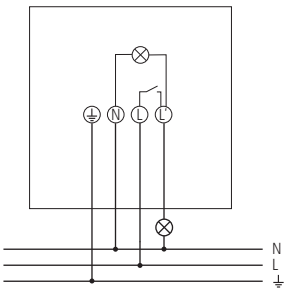


Walking diagonally to the detector
Walking head on to the detector
Mounting height 2.5 m

Connection diagrams

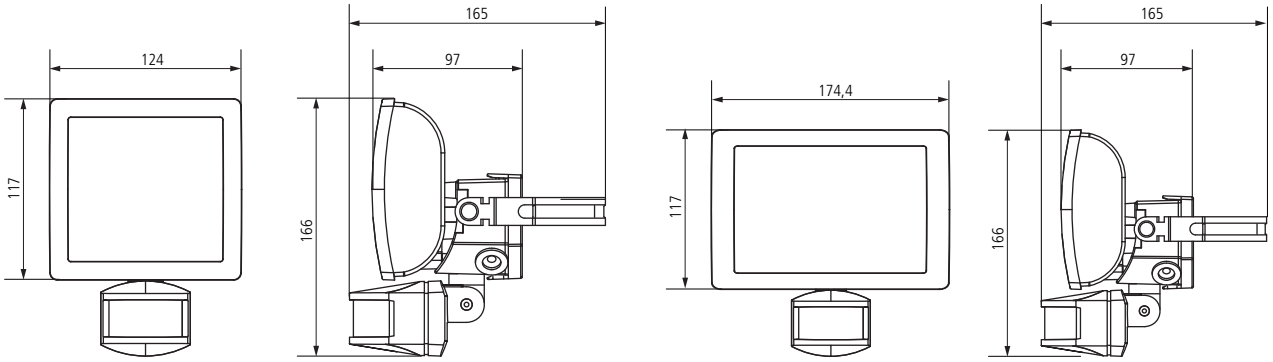


theLeda E10, theLeda E20



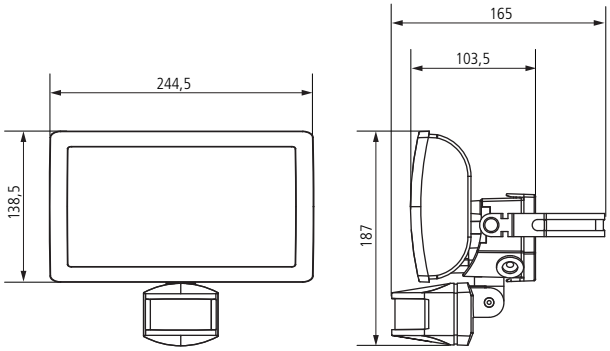
theLeda E30

Scale drawings



theLeda E10

theLeda E20



theLeda E30



Description

Common functions
- LED spotlight
- Suitable for outdoor use
- Not suitable for dimming application

theLeda E10L
- 1 LED spot with 10 W

theLeda E20L
- 1 LED spot with 20 W

theLeda E30L
- 1 LED spot with 30 W

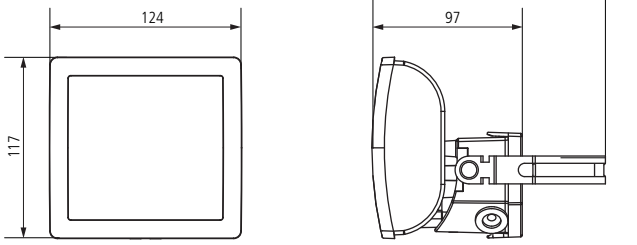
Product selection

Installation type	LED	Colour	Type	Article number
Wall installation	10 W	White	theLeda E10L WH	1020711
		Black	theLeda E10L BK	1020712
	20 W	White	theLeda E20L WH	1020713
		Black	theLeda E20L BK	1020714
	30 W	White	theLeda E30L WH	1020715
		Black	theLeda E30L BK	1020716

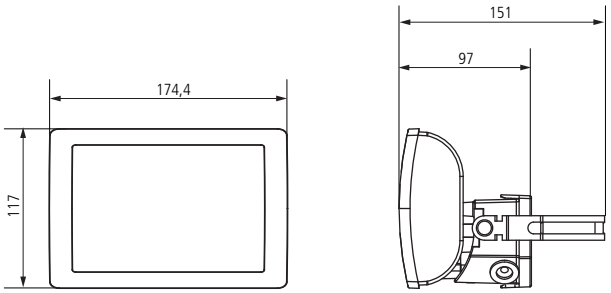
Technical data

	theLeda E10L		theLeda E20L		theLeda E30L	
Operating voltage	230 V AC					
Frequency	50 – 60 Hz					
LED output (lighting current)	750 lm	685 lm	1325 lm	1260 lm	2310 lm	2115 lm
Colour temperature	5000 – 5600 K					
Ambient temperature	– 20 °C ... +40 °C					
Protection class	I					
Type of protection	IP 55					

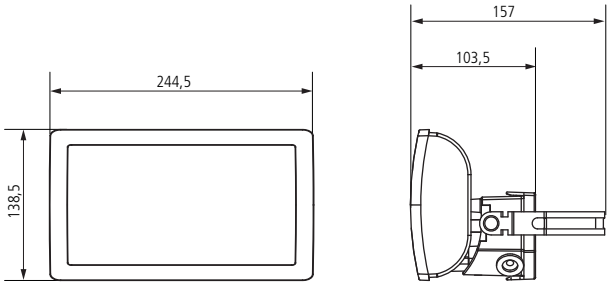
Scale drawings



theLeda E10L

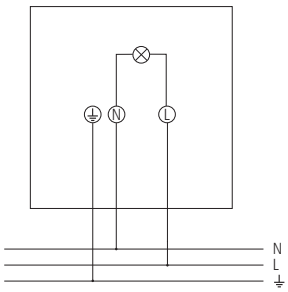


theLeda E20L



theLeda E30L

Connection diagrams





LUXA 102-140 LED 8W W WH



LUXA 102-140 LED 16W W BK

Description

Common functions

- LED spotlight with motion detector
- Spotlight can be swivelled ± 40° horizontally, and adjusted 90° downwards
- Suitable for outdoor use
- Automatic lighting control based on presence and brightness
- 90° detection angle at a detection range of 10 m
- Additional creep under protection with 140° detection angle at a detection range of 2 m
- Sensor head can be turned by ± 90° horizontally
- Area limit via lens attachment
- Single-handed plug-in installation
- Instant start-up possible via factory preset
- Adjustable lux value and switch-off delay
- Settings can be changed without tools
- Optional purely twilight-dependent control
- Not suitable for dimming applications

LUXA 102-140 LED 8W

- 1 LED spot with 8 W (equivalent to 100 W Halogen spotlight)

LUXA 102-140 LED 16W

- 2 LED spots with 8 W each (equivalent to 2 x 100 W Halogen spotlight)

8

Product selection

Installation type	LED output	Colour temperature	Colour	Type	Article number
Wall installation	8 W	6000 K, daylight white	White	LUXA 102-140 LED 8W WH	1020971
			Black	LUXA 102-140 LED 8W BK	1020972
	8 W	3000 K, warm white	White	LUXA 102-140 LED 8W W WH	1020951
			Black	LUXA 102-140 LED 8W W BK	1020952
	16 W	6000 K, daylight white	White	LUXA 102-140 LED 16W WH	1020973
			Black	LUXA 102-140 LED 16W BK	1020974
	16 W	3000 K, warm white	White	LUXA 102-140 LED 16W W WH	1020953
			Black	LUXA 102-140 LED 16W W BK	1020954

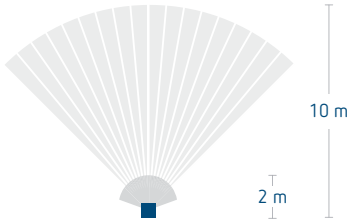
Technical data

	LUXA 102-140 LED 8W	LUXA 102-140 LED 8W W	LUXA 102-140 LED 16W	LUXA 102-140 LED 16W W
Operating voltage	100 – 240 V AC			
Frequency	50 – 60 Hz			
Stand-by consumption	0,3 W			
Setting range brightness	5 – 200 lx or just presence dependent			
LED output (lighting current)	8 W (430 lm)		2 x 8 W (860 lm)	
Colour temperature	6000 K, daylight white	3000 K, warmwhite	6000 K, daylight white	3000 K, warmwhite

	LUXA 102-140 LED 8W	LUXA 102-140 LED 8W W	LUXA 102-140 LED 16W	LUXA 102-140 LED 16W W
Detection angle	90° (140° Creep under protection)			
Light switch-off delay	5 s – 10 min			
Ambient temperature	– 20 °C ... +40 °C			
Protection class	II			
Type of protection	IP 44			

Detection range (Semicircular)

Mounting height	Walking head on to	Walking diagonally
2 m	2 m	10 m
2,5 m	2 m	10 m
3 m	2 m	9 m
3,5 m	2 m	8 m
4 m	2 m	6 m



Walking diagonally to the detector
Walking head on to the detector
Creep under protection
Mounting height: 2.5 m

Accessories

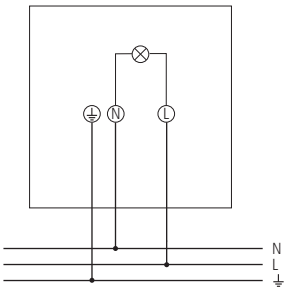


LUXA LED corner angle WH
↳ Art.No.: 9070756
Details page 284

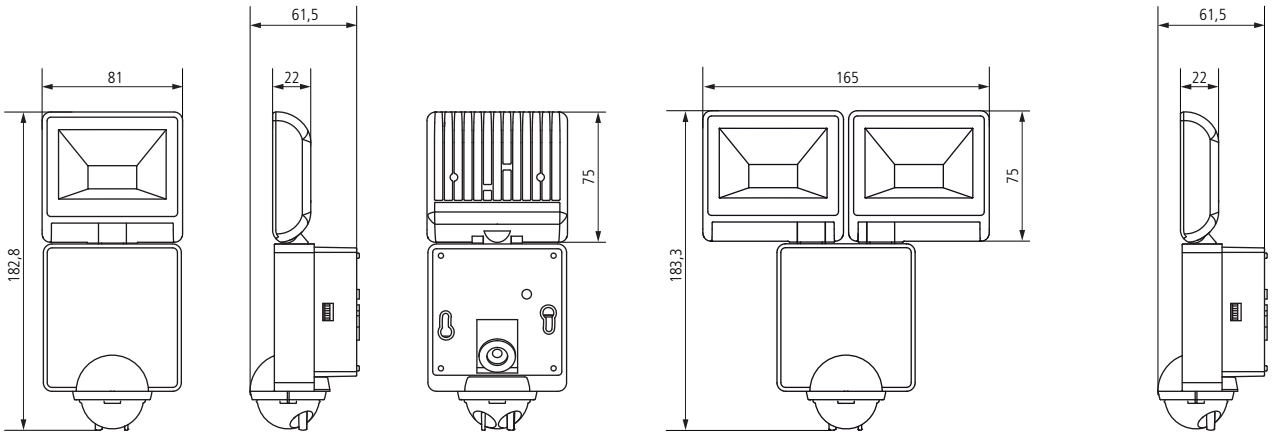


LUXA LED corner angle BK
↳ Art.No.: 9070757
Details page 284

Connection diagrams



Scale drawings





Description

Common functions

- LED spotlight with motion detector
- 1 LED spot with 32 W (equivalent to 230 W Halogen spotlight)
- Suitable for outdoor use
- Automatic lighting control based on presence and brightness
- Additional light switch output (relay 230 V AC)
- 180° detection angle at a detection range of 12 m
- Additional creep under protection with 220° detection angle at a detection range of 1 m
- Sensor head can be turned by ± 90° horizontally
- Spotlight can be swivelled ± 90° horizontally, and adjusted 55° downwards
- Area limit via lens attachment
- Single-handed plug-in installation
- Instant start-up possible via factory preset
- Adjustable lux value and switch-off delay
- Settings can be changed without tools
- Optional purely twilight-dependent control
- Master / master switching
- Additional spacer included. For flexible installation (cable entry below, side, top and more space for cables) and an increased angle of rotation for spotlight
- Not suitable for dimming application

Product selection

Installation type	Channel	Detection angle	Colour	Type	Article number
Wall installation	Light	180°	White	LUXA 102-180 LED 32W WH	1020975
			Black	LUXA 102-180 LED 32W BK	1020976

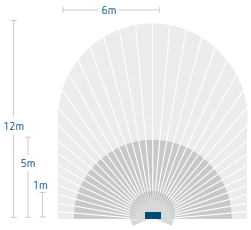
Technical data

	LUXA 102-180 LED 32W
Operating voltage	220–240 V AC
Frequency	50–60 Hz
Stand-by consumption	0,5 W
Setting range brightness	5–200 lx or just presence dependent
Switching capacity light	8 AX (at 230 V AC, cos φ = 1), 2,6 A (at 230 V AC, cos φ = 0.6)
LED output (lighting current)	32 W (2000 lm)
Colour temperature	6000 K, daylight white
Detection angle	180°
Switching output	Not potential-free (230 V)
Light switch-off delay	5 s–10 min
Incandescent / halogen lamp load	1000 W

	LUXA 102-180 LED 32W
LED lamp < 2 W	10 W
LED lamp 2–8 W	25 W
Ambient temperature	–25 °C ... +45 °C
Protection class	II
Type of protection	IP 55

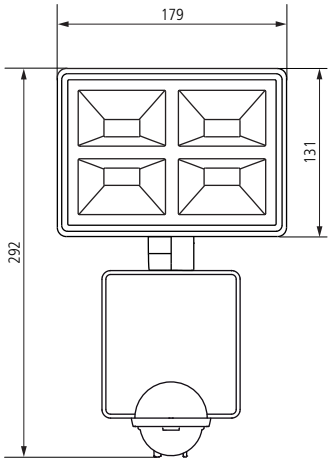
Detection range (Semicircular)

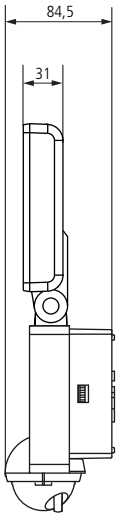
Mounting height	Walking head on to	Walking diagonally
2 m	5 m	12 m
2,5 m	5 m	12 m
3 m	5 m	10 m
3,5 m	3 m	9 m
4 m	3 m	7 m



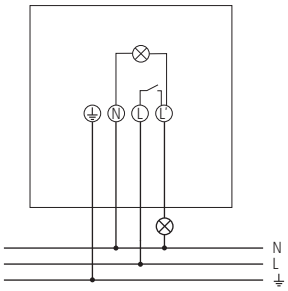
Walking diagonally to the detector
Walking head on to the detector
Creep under protection
Mounting height: 2.5 m

Scale drawings





Connection diagrams



8



Description

Common functions
- LED spotlight
- Suitable for outdoor use
- Single-handed plug-in installation
- Instant start-up possible via factory preset
- Not suitable for dimming application

LUXA 102 FL LED 8W
- 1 LED spot with 8 W (equivalent to 100 W Halogen spotlight)
- Spotlight can be swivelled ± 40° horizontally, and adjusted 90° downwards

LUXA 102 FL LED 16W
- 2 LED spots with 8 W each (equivalent to 2 x 100 W Halogen spotlight)
- Spotlight can be swivelled ± 40° horizontally, and adjusted 90° downwards

LUXA 102 FL LED 32W
- 1 LED spot with 32 W (equivalent to 230 W Halogen spotlight)
- Additional spacer included. For flexible installation (cable entry below, side, top and more space for cables) and an increased angle of rotation for spotlight
- Spotlight can be swivelled ± 90° horizontally, and adjusted 55° downwards

Product selection

Installation type	Channel	Colour, temperature	Colour	Type	Article number
Wall installation	8 W	6000 K, daylight white	White	LUXA 102 FL LED 8W WH	1020771
			Black	LUXA 102 FL LED 8W BK	1020772
	8 W	3000 K, warm white	White	LUXA 102 FL LED 8W W WH	1020751
			Black	LUXA 102 FL LED 8W W BK	1020752
	16 W	6000 K, daylight white	White	LUXA 102 FL LED 16W WH	1020773
			Black	LUXA 102 FL LED 16W BK	1020774
	16 W	3000 K, warm white	White	LUXA 102 FL LED 16W W WH	1020753
			Black	LUXA 102 FL LED 16W W BK	1020754
	32 W	6000 K, daylight white	White	LUXA 102 FL LED 32W WH	1020775
			Black	LUXA 102 FL LED 32W BK	1020776

Technical data

	LUXA 102 FL LED 8W	LUXA 102 FL LED 8W W	LUXA 102 FL LED 16W	LUXA 102 FL LED 16W W	LUXA 102 FL LED 32W
Operating voltage	100 – 240 V AC				220 – 240 V AC
Frequency	50 – 60 Hz				
LED output (lighting current)	8 W (430 lm)		2 x 8 W (860 lm)		32 W (2000 lm)
Colour temperature	6000 K, daylight white	3000 K, warmwhite	6000 K, daylight white	3000 K, warmwhite	6000 K, daylight white
Ambient temperature	– 20 °C ... +40 °C				– 25 °C ... +45 °C
Protection class	II				
Type of protection	IP 44				IP 55

Accessories

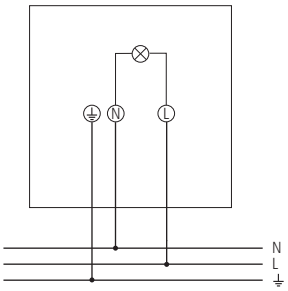


LUXA LED corner angle WH
for LUXA 102 FL LED 8W,
LUXA 102 FL LED 16W
↳ Art.No.: 9070756
Details page 284

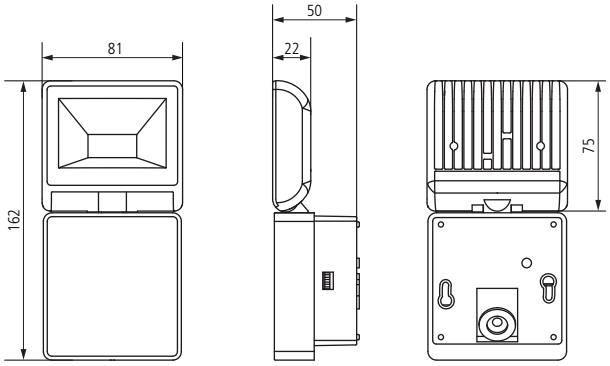


LUXA LED corner angle BK
for LUXA 102 FL LED 8W,
LUXA 102 FL LED 16W
↳ Art.No.: 9070757
Details page 284

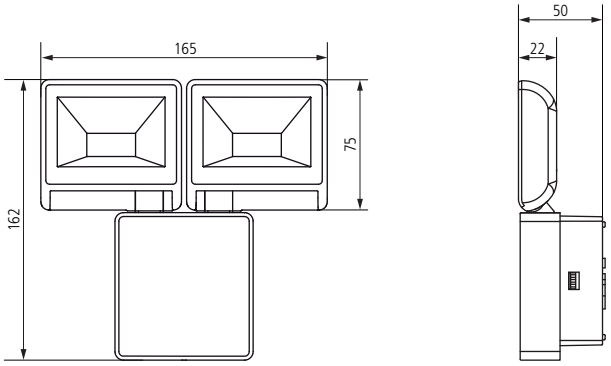
Connection diagrams



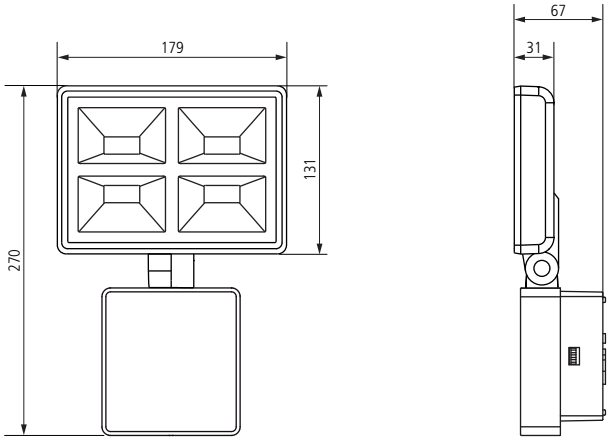
Scale drawings



LUXA 102 FL LED 8 W



LUXA 102 FL LED 16 W



LUXA 102 FL LED 32 W



Description

Common functions

- Motion detector (PIR)
- For outdoor use
- Integrated halogen spotlight for extensive lighting
- Energy saving ecoHalogen light bulb with energy efficient class C (R7s socket) included
- 150° detection angle
- Automatic lighting control based on presence and brightness
- Spotlight can be swivelled ± 45° horizontally, and adjusted 60° upwards and 30° downwards using screw fixings
- Additional creep under protection
- Sensor head can be turned by ± 90° horizontally and by 40° downwards
- Instant start-up possible via factory preset
- Single-handed plug-in installation with retained screws
- Controls are placed protected
- Additional light switch output (relay 230 V AC)
- Mixed light measurement suitable for the control of fluorescent, incandescent and halogen lamps
- Spotlight with tough aluminium die-cast housing
- Adjustable brightness switching value and switch-off delay
- Sensitivity can be reduced to limit detection area

LUXA 102-150 / 150W

- 120 W ecoHalogen spotlight (comparable with regular 150 W spotlight)

LUXA 102-150 / 500W

- 400 W ecoHalogen spotlight (comparable with regular 500 W spotlight)

Product selection

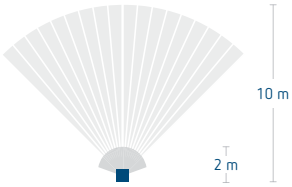
Installation type	Channel	Detection angle	Colour	Type	Article number
Wall installation	Light	150°	White	LUXA 102-150 / 150W white	1020961
			Black	LUXA 102-150 / 150W black	1020962
			White	LUXA 102-150 / 500W white	1020963
			Black	LUXA 102-150 / 500W black	1020964

Technical data

	LUXA 102-150 / 150W white	LUXA 102-150 / 500W
Operating voltage	230 V AC	
Frequency	50 – 60 Hz	
Stand-by consumption	0,9 W	
Setting range brightness	5 – 1000 lx Infinitely adjustable	
Switching capacity light	8 A (at 230 V AC, cos φ = 1), 6 A (at 230 V AC, cos φ = 0.6), 3 AX (at 230 V AC, cos φ = 0.3)	
Detection angle	150°	
Switching output	Not potential-free (230 V)	
Light switch-off delay	5 s – 12 min	

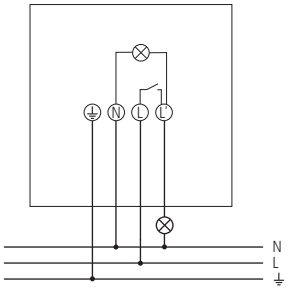
	LUXA 102-150 / 150W white	LUXA 102-150 / 500W
Incandescent / halogen lamp load	1000 W	500 W
Ambient temperature	−15 °C ... +45 °C	
Protection class	I according to EN 60 669-2-1	
Type of protection	IP 54	

Detection range (Semicircular)

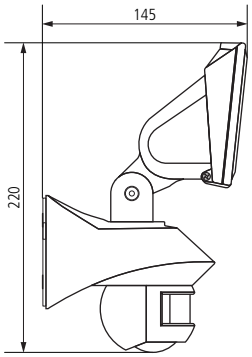


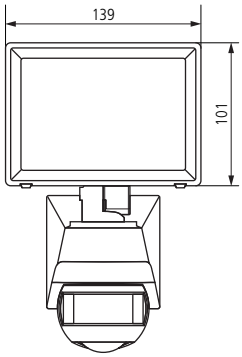
Walking diagonally to the detector
Walking head on to the detector
Mounting height: 2.5 m

Connection diagrams

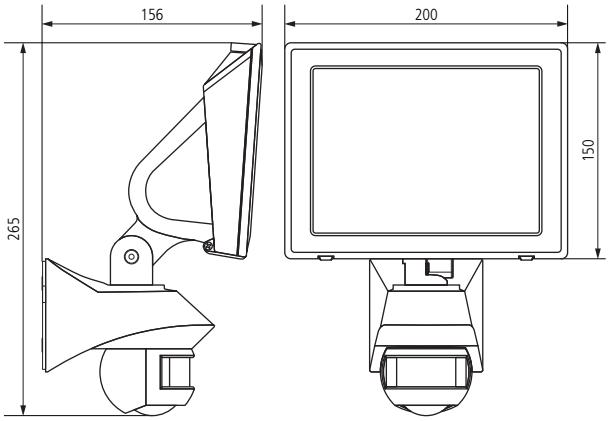


Scale drawings





LUXA 102-150 / 150W



LUXA 102-150 / 500W



Description

- Passive infra-red motion detector for ceiling installation
- Circular detection area 360°, up to Ø 9 m (64 m²)
- Mixed light measurement suitable for fluorescent lamps (FL / PL / ESL), halogen / incandescent lamps and LEDs
- Channel A light: relay, 230 V
- Operation as fully automatic device
- Brightness switching value configurable, teach-in function
- Pulse function for staircase light time switch
- Detection sensitivity configurable
- Test mode for checking function and detection area
- Ready for immediate use due to factory presetting (Brightness switching value 300 lux, Time delay 10 min)
- One of these optional remote controls is required for changing the values and attitudes:
  - Management remote control SendoPro
  - Installation remote control theSenda P
- Optional user remote control:
  - theSenda S

theMova S360-100 DE

- 1 channel light
- Automatic motion and brightness-dependent control for lighting

theMova S360-101 DE

- 1 channnel light and 1 channel presence
- Automatic motion and brightness-dependent control for lighting and HVAC
- Channel H, presence: relay, floating e.g. for HVAC control
- Time delay configurable

Product selection

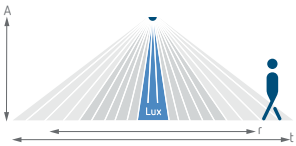
Installation type	Channel	Operating voltage	Colour	Type	Article number
Ceiling installation	Light	230 V AC	White	theMova S360-100 DE WH	1030560
			Grey	theMova S360-100 DE GR	1030561
	Light | Presence	230 V AC	White	theMova S360-101 DE WH	1030565
			Grey	theMova S360-101 DE GR	1030566
			Additional colours available upon request		

Technical data

	theMova S360-100 DE	theMova S360-101 DE
Operating voltage	230 V AC	
Frequency	50 Hz	
Installation height	2 – 4 m	
Power consumption	0,5 W	
Setting range brightness	30 – 3000 lx	
Light switch-off delay	Pulse (0,5 s), 10 s – 60 min	
Type of contact light	Relay 230 V / 10 A µ-contact	
Incandescent / halogen lamp load	2300 W	
Compact and flourescent lamps	1150 VA (cos φ = 0,5)	
LED lamp < 2 W	25 W	
LED lamp 2 – 8 W	70 W	
LED lamp > 8 W	80 W	
Switching capacity presence	–	50 W / 50 VA, max. 2 A
Ambient temperature	– 15 °C ... +50 °C	
Type of protection	IP 54 (when fitted)	

Detection range (Round)

Mounting height (A)	Head on to (r)	Diagonally (t)
2 m	5 m² | 2,5 m	38 m² | 7 m
2,5 m	7 m² | 3 m	38 m² | 7 m
3 m	13 m² | 4 m	50 m² | 8 m
3,5 m	13 m² | 4 m	50 m² | 8 m
4 m	13 m² | 4 m	64 m² | 9 m



Accessories



SendoPro 868-A
↳ Art.No.: 9070675
Details page 283

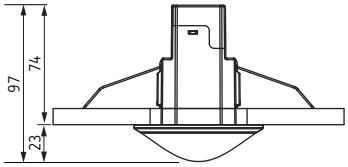


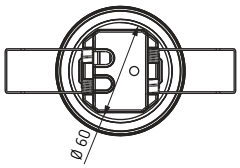
theSenda P
↳ Art.No.: 9070910
Details page 285



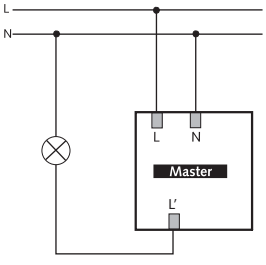
theSenda S
↳ Art.No.: 9070911
Details page 285

Scale drawings

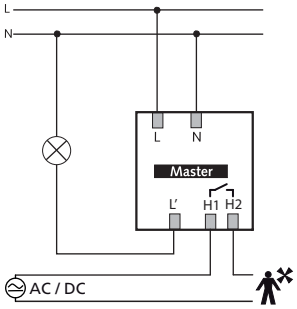




Connection diagrams



theMova S360-100 DE



theMova S360-101 DE

8


theMova S360 AP WH

Description

- Passive infra-red motion detector for ceiling installation
- Circular detection area 360°, up to Ø 9 m (64 m²)
- Mixed light measurement suitable for fluorescent lamps (FL / PL / ESL), halogen / incandescent lamps and LEDs
- Channel A light: relay, 230 V
- Operation as fully automatic device
- Brightness switching value configurable, teach-in function
- Pulse function for staircase light time switch
- Detection sensitivity configurable
- Test mode for checking function and detection area
- Ready for immediate use due to factory presetting (Brightness switching value 300 lux, Time delay 10 min)
- One of these optional remote controls is required for changing the values and attitudes:
  - Management remote control SendoPro
  - Installation remote control theSenda P
- Optional user remote control:
  - theSenda S

theMova S360-100 AP

- 1 channel light
- Automatic motion and brightness-dependent control for lighting

theMova S360-101 AP

- 1 channnel light and 1 channel presence
- Automatic motion and brightness-dependent control for lighting and HVAC
- Channel H, presence: relay, floating e.g. for HVAC control
- Time delay configurable

Product selection

Installation type	Channel	Operating voltage	Colour	Type	Article number
Ceiling installation	Light	230 V AC	White	theMova S360-100 AP WH	1030550
			Grey	theMova S360-100 AP GR	1030551
	Light | Presence	230 V AC	White	theMova S360-101 AP WH	1030555
			Grey	theMova S360-101 AP GR	1030556
			Additional colours available upon request		

8

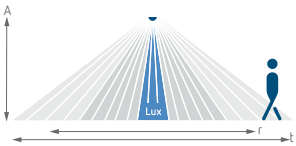
Technical data

	theMova S360-100 AP	theMova S360-101 AP
Operating voltage	230 V AC	
Frequency	50 Hz	
Installation height	2 – 4 m	
Power consumption	0,5 W	
Setting range brightness	ca. 30 – 3000 lx	
Light switch-off delay	Pulse (0,5 s), 10 s – 60 min	
Type of contact light	Relay 230 V / 10 A µ-contact	
Incandescent / halogen lamp load	2300 W	
Compact and flourescent lamps	1150 VA (cos φ = 0,5)	
LED lamp < 2 W	25 W	
LED lamp 2 – 8 W	70 W	
LED lamp > 8 W	80 W	
Switching capacity presence	–	50 W / 50 VA, max. 2 A
Ambient temperature	– 15 °C ... +50 °C	
Type of protection	IP 54 (when fitted)	

Additional technical data at: www.theben.de / product / Articlenumber

Detection range (Round)

Mounting height (A)	Head on to (r)	Diagonally (t)
2 m	5 m² | 2,5 m	38 m² | 7 m
2,5 m	7 m² | 3 m	38 m² | 7 m
3 m	13 m² | 4 m	50 m² | 8 m
3,5 m	13 m² | 4 m	50 m² | 8 m
4 m	13 m² | 4 m	64 m² | 9 m



Accessories



SendoPro 868-A
↳ Art.No.: 9070675
Details page 283

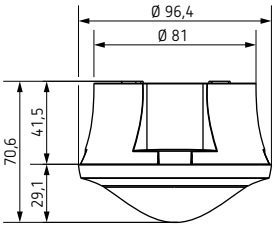


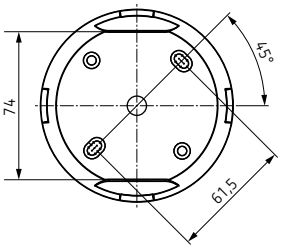
theSenda P
↳ Art.No.: 9070910
Details page 285



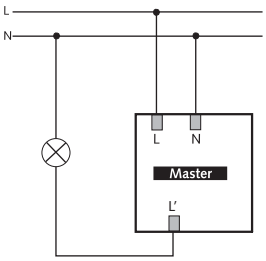
theSenda S
↳ Art.No.: 9070911
Details page 285

Scale drawings

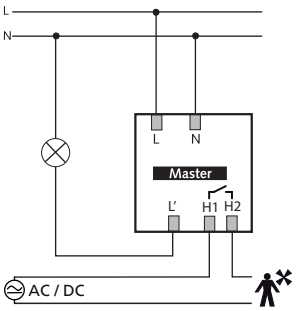




Connection diagrams



theMova S360-100 AP



theMova S360-101 AP


theMova P360 UP WH

Description

- Passive infra-red motion detector for ceiling installation
- Circular detection area 360°, up to Ø 24 m (452 m²)
- Restriction of detection area with cover clips
- Automatic motion and brightness-dependent control for lighting
- Mixed light measurement suitable for fluorescent lamps (FL / PL / ESL), halogen / incandescent lamps and LEDs
- Channel A light: relay, 230 V
- Operation as fully automatic device
- Brightness switching value configurable, teach-in function
- Pulse function for staircase light time switch
- Time delay configurable
- Detection sensitivity configurable
- Ready for immediate use due to factory presetting
- Test mode for checking function and detection area
- Ceiling installation in flush-mounted socket
- Ceiling installation possible with back box (option)
- User remote control theSenda S (option)
- Management remote control SendoPro (option)
- Installation remote control theSenda P (option)

Product selection

Installation type	Channel	Operating voltage	Colour	Type	Article number
Ceiling installation	Light	110–230 V AC	White	theMova P360-100 UP WH	1030600
			Grey	theMova P360-100 UP GR	1030601
			Additional colours available upon request		

8

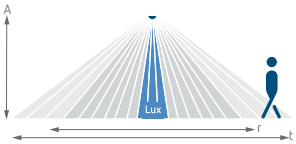
Technical data

	theMova P360-100 UP
Operating voltage	110–230 V AC
Frequency	50–60 Hz
Installation height	2–10 m
Power consumption	ca. 0,1 W
Setting range brightness	ca. 30–3000 lx
Light switch-off delay	Pulse (0,5 s), 10 s–60 min
Type of contact light	Relay 230 V / 10 A µ-contact
Incandescent / halogen lamp load	2300 W
Compact and flourescent lamps	1150 VA (cos φ = 0,5)
LED lamp < 2 W	60 W
LED lamp 2–8 W	180 W
LED lamp > 8 W	200 W
Ambient temperature	–15 °C ... +50 °C
Type of protection	IP 54 (when fitted)

Detection range (Round)

Mounting height (A)	Head on to (r)	Diagonally (t)
2 m	28 m² | 6 m	380 m² | 22 m
2,5 m	38 m² | 7 m	415 m² | 23 m
3 m	50 m² | 8 m	452 m² | 24 m
3,5 m	50 m² | 8 m	452 m² | 24 m
6 m	50 m² | 8 m	452 m² | 24 m
10 m	50 m² | 8 m	491 m² | 25 m

With a mounting height of more than 3.5 m walking motions are necessary and the detection areas of several detectors should overlap in the marginal zone. All figures are up to values. The detection range decreases with increasing temperatures.



Accessories



Surface frame 110A WH
↳ Art.No.: 9070912
Details page 280



theSenda P
↳ Art.No.: 9070910
Details page 285



theSenda S
↳ Art.No.: 9070911
Details page 285

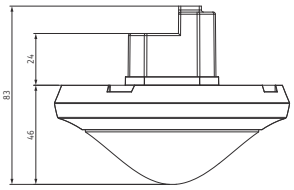
QuickSafe
Details page 282

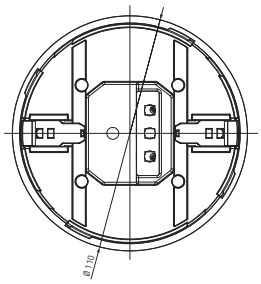
Masking clip
Details page 281

Ceiling installation box 73A
Details page 281

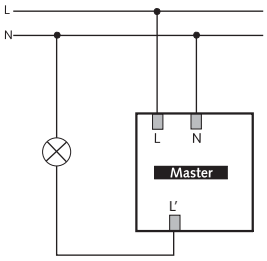
SendoPro 868-A
Details page 283

Scale drawings





Connection diagrams



8



LUXA 103-200

Description

- Motion detector (PIR)
- Automatic lighting control based on presence and brightness
- Wall installation
- Compatible with branded switches, replaces conventional light switches
- Area limit via lens attachment
- Manual AUTO / ON / OFF switching by simple adjustment of cover flap
- Teach-in of current brightness value
- Instant start-up possible via factory preset
- No unintentional adjustment due to covered up controls
- Adjustable brightness switching value and switch-off delay
- Sensitivity can be reduced to limit detection area
- Pulse function
- Test function

LUXA 103-200

- Mixed light measurement suitable for the control of fluorescent, incandescent and halogen lamps
- Expansion of detection area through integrated master / slave or master / master function when using up to 10 devices
- With acoustic advance shut-off warning 15 seconds before light switches off

LUXA 103-200 T

- 2 wire connection, ideal for retrofitting
- Light switch output (triac, 230 V AC)
- Mixed light measurement suitable for incandescent and halogen lamps (no electronic ballast)
- Advance shut-off warning through dimming 15 seconds before light switches off

Product selection

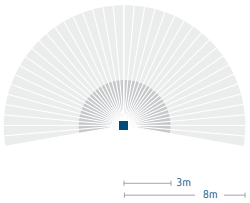
PG	Channel	Detection angle	Type	Article number
Flush-mounted wall installation	Light	200°, circular	LUXA 103-200	1030030
			LUXA 103-200 T	1030031

8

Technical data

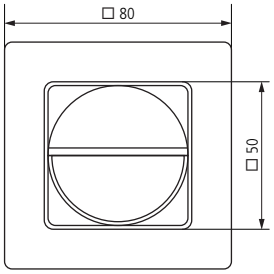
	LUXA 103-200	LUXA 103-200 T
Operating voltage	230 V AC	
Frequency	50 Hz	
Stand-by consumption	1 W	0,7 W
Setting range brightness	10 – 1000 lx Infinitely adjustable	
Switching capacity light	10 A (at 230 V AC, cos φ = 1), 3 AX (at 230 V AC, cos φ = 0.3)	2 A (at 230 V AC, cos φ = 1)
Detection angle	200°, circular	
Installation height	1,2 – 2 m	
Light switch-off delay	20 s – 30 min	
Incandescent lamp load	1000 W	400 W
Fluorescent lamp load (conventional) parallel-corrected	400 VA, 42 µF	–
Ambient temperature	0 °C ... +45 °C	
Protection class	II	
Type of protection	IP 40	

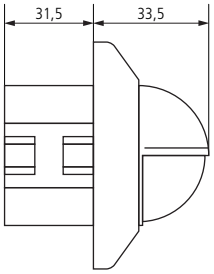
Detection range (Semicircular)



Walking diagonally to the detector
Walking head on to the detector
Mounting height 1.2 – 2 m

Scale drawings





Accessories

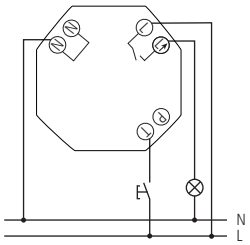


Surface frame LUXA 103-200
↳ Art.No.: 9070504
Details page 284

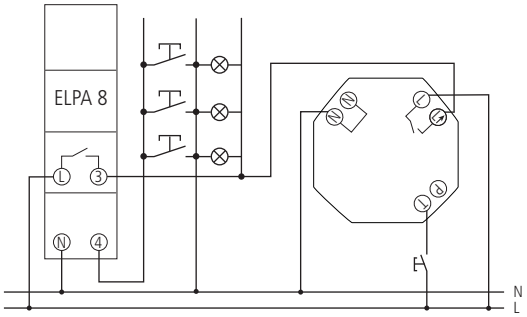


RC filter
↳ Art.No.: 9070523
Details page 283

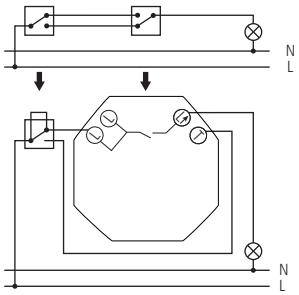
Connection diagrams



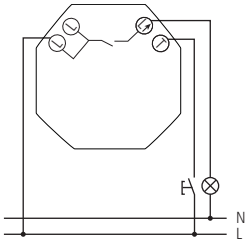
LUXA 103-200



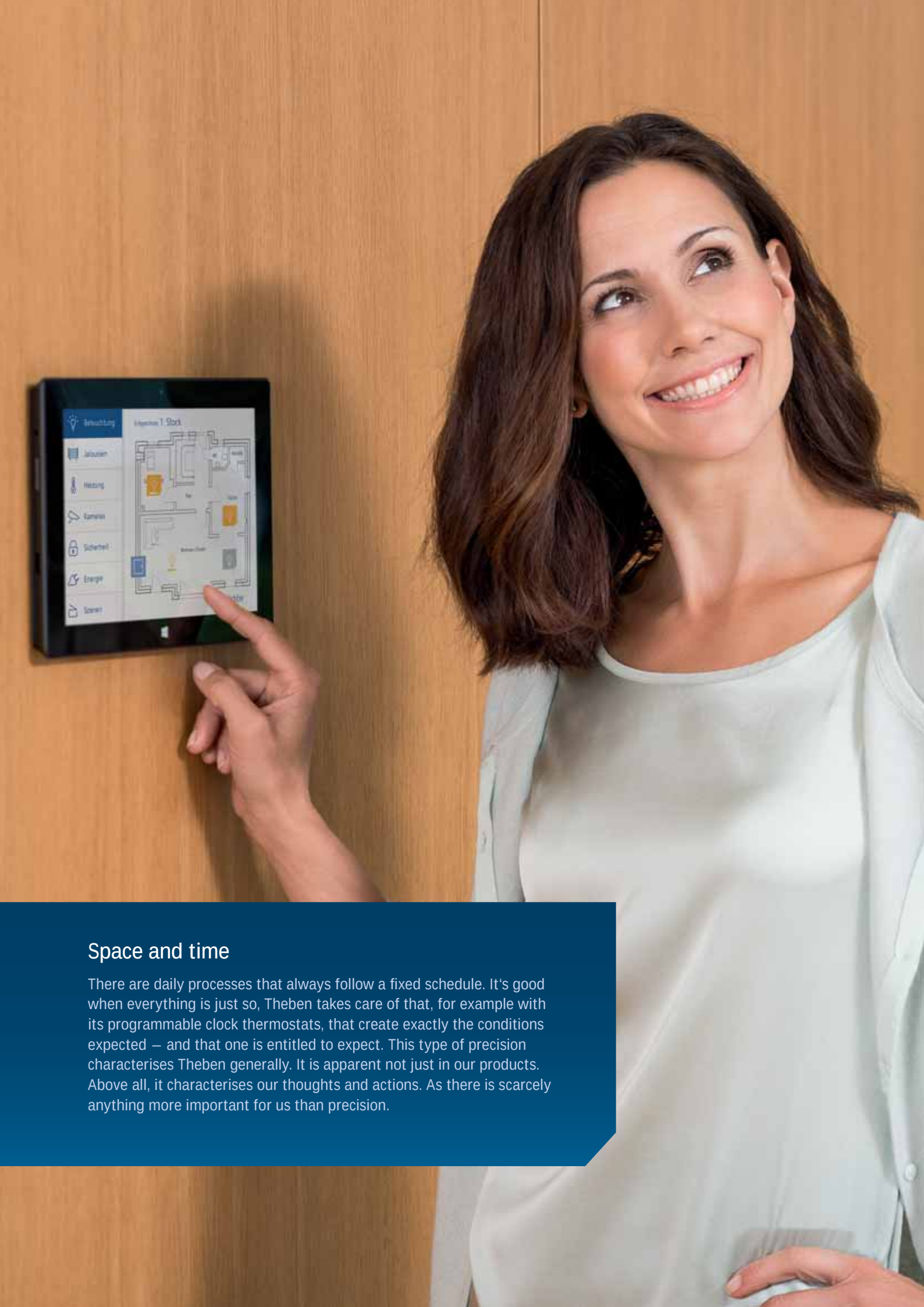
LUXA 103-200



LUXA 103-200 T



LUXA 103-200 T



Space and time

There are daily processes that always follow a fixed schedule. It‘s good when everything is just so, Theben takes care of that, for example with its programmable clock thermostats, that create exactly the conditions expected – and that one is entitled to expect. This type of precision characterises Theben generally. It is apparent not just in our products. Above all, it characterises our thoughts and actions. As there is scarcely anything more important for us than precision.

	Program	Type of connection	Operating voltage	Switching capacity at 250 V AC	Type of contact	Type	Page
Digital battery version							
	Weekly program	2/3-way conductors	2 AA batteries	6 (1) A	Changeover contact	RAMSES 811 top2	160
						RAMSES 831 top2	160
		Radio controlled	2 AA batteries	16 (2) A	NO contact	RAMSES 813 top2 HF Set A	164
						RAMSES 813 top2 HF Set S	164
				6 (1) A	Changeover contact	RAMSES 813 top2 HF Set 1	164
						RAMSES 833 top2 HF Set 1	166
						RAMSES 833 top2 HF Set 2	166
Digital 230 V							
	Weekly program	3-/4-conductors	230 V AC	6 (1) A	Changeover contact	RAMSES 812 top2	162
						RAMSES 832 top2	162
	Weekly program	DuoFix spring terminals	230 V AC	10 (2) A	Changeover contact	RAMSES 366/1 top2	168
OpenTherm							
	Weekly program	2-way conductor (BUS) room controller	230 V AC	2 x 2 (1) A	NO contact	RAMSES 816 top2 OT	170
				5 x 5 (1) A	NO contact	RAMSES 856 top2 OT	172
Analogue battery version							
	Daily program	2/3-way conductors	2 AA batteries	6 (1) A	Changeover contact	RAMSES 784 S	174
	Daily/weekly program	2/3-way conductors	2 AA batteries	6 (1) A	Changeover contact	RAMSES 784	176
Analogue 230 V							
	Daily program	3-/4-conductors	230 V AC	6 (1) A	Changeover contact	RAMSES 722 S	174
	Daily/weekly program	3-/4-conductors	230 V AC	6 (1) A	Changeover contact	RAMSES 722	176
						RAMSES 782	176
	Daily program	3-/4-conductors	230 V AC	6 (1) A	Changeover contact	RAMSES 721	176
	Daily/weekly program	3-/4-conductors	230 V AC	6 (1) A	Changeover contact	RAMSES 725	176

Clock thermostats, Digital battery version



RAMSES 811 top2



RAMSES 831 top2

Description

Common functions

- Digital clock thermostat with a low profile design for time-dependent monitoring and control of room temperature
- Battery version
- Suitable for energy-saving room temperature control in houses, apartments, heating zones, offices, showrooms, factories, medical practices, holiday homes
- Temperature is set quickly via rotary switch
- INFO key for viewing important settings
- Quick start-up via 3 basic programs with individually changeable comfort and reduced temperature
- Party/ECO program
- Fully automatic summer/winter-time correction
- Holiday program with reduction phase or date-controlled heating phase for holiday homes
- Different control types can be individually set
- Optimum start option thanks to operating point and switching differential setting option
- 24 programmable time phases per program also enable reduction phases during the day
- Plug-in base for wall or flush-mounted socket installation

RAMSES 831 top2

- Backlit display through keystroke
- External input for connection of presence detectors, temperature sensors, floor sensors, window contacts or telephone remote switches
- Optimisation function for automatic correction of heating start up

Product selection

9

Type of connection	Program	Switching capacity at 250 V AC	Setting range temperature	Operating voltage	Type	Article number
2/3-way conductors	Weekly program	6 (1) A	+6 °C ... +30 °C	2 AA batteries	RAMSES 811 top2	8119132
					RAMSES 831 top2	8319132

Technical data

	RAMSES 811 top2	RAMSES 831 top2
Operating voltage	2 AA batteries	
Type of contact	Changeover contact	
Switching capacity	6 A (at 250 V AC, cos φ = 1), 1 A (at 250 V AC, cos φ = 0.6)	
Setting range temperature	+6 °C ... +30 °C	
Time basis	Quartz	
Program	Weekly program, Daily program, Holiday program, 3 basic programs	
Number of memory locations	42, max. 24 per program	
Control types	Pulse width modulation, Hysteresis controller	
Control period	5–30 min	
Control capture range	0,2–5 K	
Switching output	Potential-free	
Time accuracy at 25 °C	≤ ± 1 s/day (quartz)	
Power reserve	Max. 10 mins without losing time	
Battery life	Approx. 1 year, depending on switching frequency	
Type of protection	IP 20	
Protection class	II according to EN 60 730-1	

Accessories



Actuator ALPHA 5 230 V
↳ Art.No.: 9070441
Details page 287



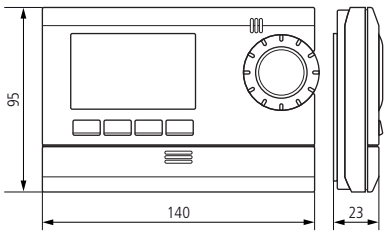
Actuator ALPHA 5 24 V
↳ Art.No.: 9070442
Details page 288



Temperature sensor
for RAMSES 831 top2
↳ Art.No.: 9070321
Details page 287

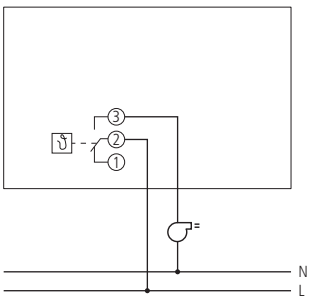
Temperature sensor RAMSES IP 65
for RAMSES 831 top2
↳ Art.No.: 9070459
Details page 286

Scale drawings

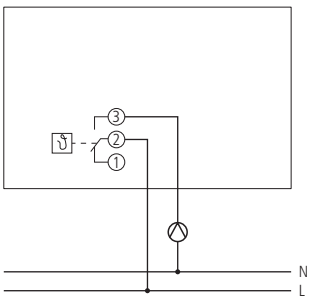


RAMSES 811 top2, RAMSES 831 top2

Connection diagrams



RAMSES 811 top2



RAMSES 811 top2

Clock thermostats, Digital 230 V



RAMSES 812 top2



RAMSES 832 top2

Description

Common functions

- Digital clock thermostat with alow profile design for time-dependent monitoring and control of room temperature
- Mains version
- Suitable for energy-saving room temperature control in houses, apartments, heating zones, offices, showrooms, factories, medical practices, holiday homes
- Temperature is set quickly via rotary switch
- INFO key for viewing important settings
- Quick start-up via 3 basic programs with individually changeable comfort and reduced temperature
- Party/ECO program
- Fully automatic summer/winter-time correction
- Different control types can be individually set
- Optimum start option thanks to operating point and switching differential setting option
- 24 programmable time phases per program also enable reduction phases during the day
- Plug-in base for wall or flush-mounted socket installation

RAMSES 832 top2

- Backlit display through keystroke
- External input for connection of presence detectors, temperature sensors, floor sensors, window contacts or telephone remote switches
- Optimisation function for automatic correction of heating start up

Product selection

Type of connection	Program	Switching capacity at 250 V AC	Setting range temperature	Operating voltage	Type	Article number
3-/4-conductors	Weekly program	6 (1) A	+6 °C ... +30 °C	230 V AC	RAMSES 812 top2	8120132
					RAMSES 832 top2	8320132

Technical data

	RAMSES 812 top2	RAMSES 832 top2
Operating voltage	230 V AC	
Frequency	50 Hz	
Type of contact	Changeover contact	
Switching capacity	6 A (at 250 V AC, cos φ = 1), 1 A (at 250 V AC, cos φ = 0.6)	
Setting range temperature	+6 °C ... +30 °C	
Time basis	Quartz	
Program	Weekly program, Daily program, Holiday program, 3 basic programs	
Number of memory locations	42, max. 24 per program	
Control types	Pulse width modulation, Hysteresis controller	
Control period	5–30 min	
Control capture range	0,2–5 K	
Switching output	Potential-free, not for SELV	
Time accuracy at 25 °C	≤ ± 1 s/day (quartz)	
Power reserve	5 hours	

	RAMSES 812 top2	RAMSES 832 top2
Stand-by consumption	0,4 W	
Type of protection	IP 20	
Protection class	II according to EN 60 730-1	

Accessories



Actuator ALPHA 5 230 V
↳ Art.No.: 9070441
Details page 287



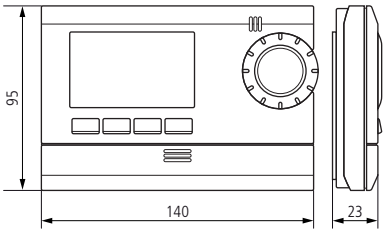
Actuator ALPHA 5 24 V
↳ Art.No.: 9070442
Details page 288



Temperature sensor
for RAMSES 832 top2
↳ Art.No.: 9070321
Details page 287

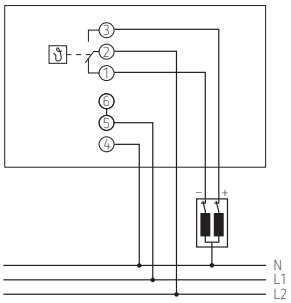
Temperature sensor RAMSES IP 65
for RAMSES 832 top2
↳ Art.No.: 9070459
Details page 286

Scale drawings

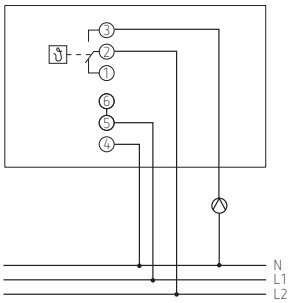


RAMSES 812 top2, RAMSES 832 top2

Connection diagrams

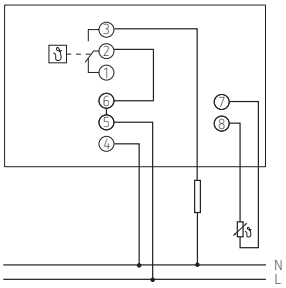


RAMSES 812 top2

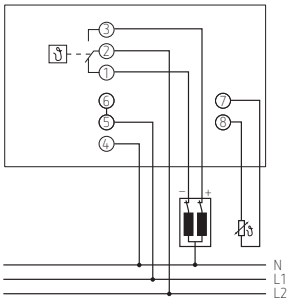


RAMSES 812 top2

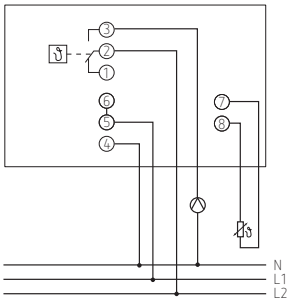
Connection diagrams



RAMSES 832 top2



RAMSES 832 top2



RAMSES 832 top2



RAMSES 813 top2 HF Set A | RAMSES 813 top2 HF Set S | RAMSES 813 top2 HF Set 1

Description

Common functions

- Radio-controlled system for room temperature control
- The system consists of one digital clock thermostat and one receiver
- Suitable for energy-saving room temperature control in houses, apartments, heating zones, offices, showrooms, factories, medical practices, holiday homes
- Required temperature set via the rotary dial
- INFO key for viewing important settings
- Quick start-up via 3 basic programs with individually changeable comfort and reduced temperature
- Party/ECO program
- Automatic summer/winter time adjustment
- Different control types can be individually set
- Optimum start option thanks to operating point and switching differential setting option
- 24 programmable time phases per program also enable reduction phases during the day
- 2 comfort and 2 reduced temperatures can be allocated to each phase
- Including base for free choice of position
- An optionally available plug-in base is required for wall installation
- Holiday program with reduced temperature or date-controlled heating phase
- Optional pump protection function
- Optional feature to warn when boiler maintenance required

RAMSES 813 top2 HF Set A

- Consisting of a RAMSES 813 top2 HF and a REC 11 receiver with an NO contact 16 (2) A/250 V AC for wall mounting

RAMSES 813 top2 HF Set S

- Consisting of a RAMSES 813 top2 HF and a REC 21 receiver as earthed intermediate connector with an NO contact 16 (2) A/230 V AC

RAMSES 813 top2 HF Set 1

- Consisting of a RAMSES 813 top2 HF and a REC 1 receiver with a two-way switch 6 (2) A/250 V AC

Product selection

Type of connection	Program	Switching capacity at 250 V AC	Setting range temperature	Operating voltage	Type	Article number
Radio controlled	Weekly program	16 (2) A	+6 °C ... +30 °C	2 AA batteries	RAMSES 813 top2 HF Set A	8139503
	Weekly program	16 (2) A	+6 °C ... +30 °C	2 AA batteries	RAMSES 813 top2 HF Set S	8139505
	Weekly program	6 (1) A	+6 °C ... +30 °C	2 AA batteries	RAMSES 813 top2 HF Set 1	8139501

Technical data

	RAMSES 813 top2 HF Set A	RAMSES 813 top2 HF Set S	RAMSES 813 top2 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), 2 A (at 250 V AC, cos φ = 0.6)		6 A (at 250 V AC, cos φ = 1), 1 A (at 250 V AC, cos φ = 0.6)
Setting range temperature	+6 °C ... +30 °C		
Time basis	Quartz		
Program	Weekly program, Daily program, Holiday program, 3 basic programs		
Number of memory locations	42, max. 24 per program		
Control types	Pulse width modulation, Hysteresis controller		
Control period	5 – 30 min		
Control capture range	0,2 – 5 K		
Switching output	Potential-free, not for SELV	Not potential-free	Potential-free
Time accuracy at 25 °C	≤ ± 1 s/day (quartz)		
Power reserve	Max. 10 mins without losing time		
Stand-by consumption	1,9 W	1,1 W	1,7 W
Battery life	Approx. 1 year, depending on switching frequency		
Width	–		5 modules
Type of protection	IP 20		
Protection class	II according to EN 60 730-1		

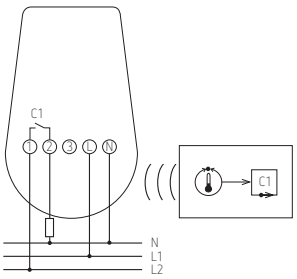
Accessories

Socket RAMSES
Details page 286

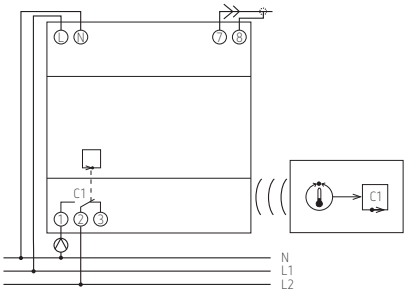
Actuator ALPHA 5 230 V
Details page 287

Actuator ALPHA 5 24 V
Details page 288

Connection diagrams

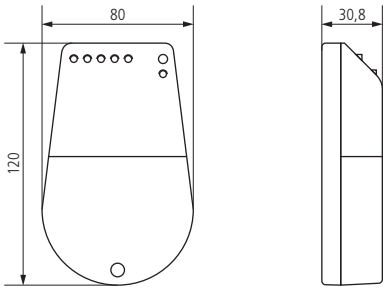


RAMSES 813 top2 HF Set A

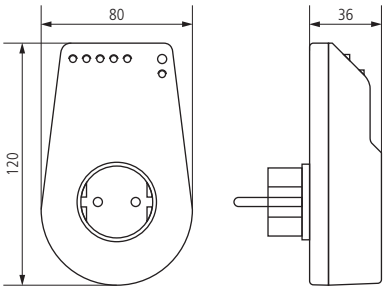


RAMSES 813 top2 HF Set 1

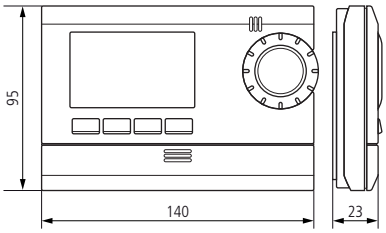
Scale drawings



RAMSES 813 top2 HF Set A



RAMSES 813 top2 HF Set S



RAMSES 813 top2 HF



RAMSES 833 top2 HF Set 1

RAMSES 833 top2 HF Set 2

Description

Common functions

- Radio-controlled system for room temperature control
- Suitable for energy-saving room temperature control in houses, apartments, heating zones, offices, showrooms, factories, medical practices, holiday homes
- The system consists of one or two digital clock thermostat and one receiver
- Required temperature set via the rotary dial
- INFO key for viewing important settings
- Quick start-up via 3 basic programs with individually changeable comfort and reduced temperature
- Party/ECO program
- Automatic summer/winter time adjustment
- Different control types can be individually set
- Optimum start option thanks to operating point and switching differential setting option
- 24 programmable time phases per program also enable reduction phases during the day
- Backlit display through keystroke
- External input for connection of presence detectors, temperature sensors, floor sensors, window contacts or telephone remote switches (can only be used in connection with optional plug-in base for wall mounting)
- Optimisation function for automatic correction of heating start up
- Holiday program with reduction phase or date-controlled heating phase for holiday homes
- Optional feature to warn when boiler maintenance required
- Optional pump protection function
- 3 comfort and 2 reduced temperatures can be allocated to each phase
- Including base for free choice of position
- An optionally available plug-in base is required for wall installation

RAMSES 833 top2 HF Set 1

- Consisting of a RAMSES 833 top2 HF and a REC 1 receiver with a two-way switch 6 (2) A/250 V DC

RAMSES 833 top2 HF Set 2

- Consisting of two RAMSES 833 top2 HF and a 2 channel REC 2 receiver with a two-way switch 6 (2) A/250 V DC per channel

Product selection

Type of connection	Program	Switching capacity at 250 V AC	Setting range temperature	Operating voltage	Type	Article number
Radio controlled	Weekly program	6 (1) A	+6 °C ... +30 °C	2 AA batteries	RAMSES 833 top2 HF Set 1	8339501
	Weekly program	6 (1) A	+6 °C ... +30 °C	2 AA batteries	RAMSES 833 top2 HF Set 2	8339502

Technical data

	RAMSES 833 top2 HF Set 1	RAMSES 833 top2 HF Set 2
Operating voltage	2 AA batteries	
Type of contact	Changeover contact	
Switching capacity	6 A (at 250 V AC, cos φ = 1), 1 A (at 250 V AC, cos φ = 0.6)	
Setting range temperature	+6 °C ... +30 °C	
Time basis	Quartz	
Program	Weekly program, Daily program, Holiday program, 3 basic programs	
Number of memory locations	42, max. 24 per program	
Control types	Pulse width modulation, Hysteresis controller	
Control period	5 – 30 min	
Control capture range	0,2 – 5 K	
Switching output	Potential-free, not for SELV	
Time accuracy at 25 °C	≤ ± 1 s/day (quartz)	
Power reserve	Max. 10 mins without losing time	
Stand-by consumption	1,7 W	2,2 W
Battery life	Approx. 1 year, depending on switching frequency	
Width	5 modules	
Type of protection	IP 20	
Protection class	II according to EN 60 730-1	

Accessories



Actuator ALPHA 5 230 V
↳ Art.No.: 9070441
Details page 287



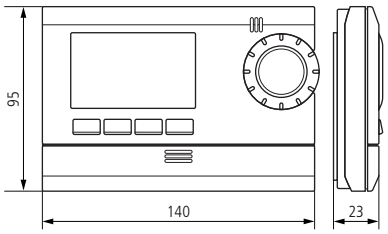
Temperature sensor
↳ Art.No.: 9070321
Details page 287

Temperature sensor RAMSES IP 65
for RAMSES 833 top2 HF Set 1
↳ Art.No.: 9070459
Details page 286

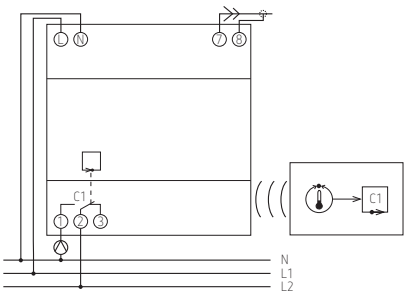
Socket RAMSES
Details page 286

Actuator ALPHA 5 24 V
Details page 288

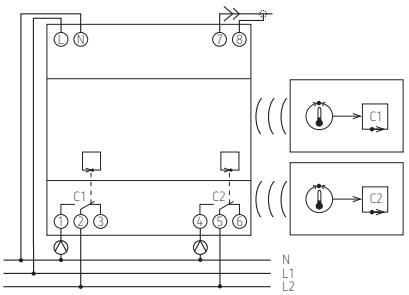
Scale drawings



Connection diagrams



RAMSES 833 top2 HF Set 1



RAMSES 833 top2 HF Set 2

Clock thermostats, Digital 230 V



RAMSES 366 / 1 top2

Description

- Digital clock thermostat with a low profile design for time-dependent monitoring and control of room temperature
- Zone control, 1 zone
- 1 external temperature sensor required
- Daily/weekly program can be set to the minute
- Date-controlled holiday program
- Programming displayed graphically by a bar arrangement in the LCD
- Fully automatic summer/winter-time correction
- Manual switching pre-selection and operation mode selector for: Automatic mode, comfort mode, reduction mode, frost protection mode
- PIN coding
- DuoFix spring terminals
- Text-oriented user guidance in display
- Interface for OBELISK top2 memory card (Copying of programs)

Product selection

Number of channels	Program	Switching capacity at 250 V AC	Setting range temperature	Operating voltage	Type	Article number
1	Weekly program	10 (2) A	+6 °C ... +30 °C	230 V AC	RAMSES 366 / 1 top2	3660100

Technical data

RAMSES 366 / 1 top2			
Operating voltage	230 V AC	Number of memory locations	42
Frequency	50 – 60 Hz	Time accuracy at 25 °C	≤ ± 0.25 s / day (quartz)
Type of contact	Changeover contact	Power reserve	10 years
Switching capacity	10 (2) A	Stand-by consumption	1,3 W
Setting range temperature	+6 °C ... +30 °C	Width	2 modules
Time basis	Quartz	Type of protection	IP 20
Program	Weekly program	Protection class	II

Accessories



Actuator ALPHA 5 230 V
↳ Art.No.: 9070441
Details page 287



Actuator ALPHA 5 24 V
↳ Art.No.: 9070442
Details page 288



Wall mounting kit 35 mm
↳ Art.No.: 9070064
Details page 278



Memory card OBELISK top2
↳ Art.No.: 9070404
Details page 279



Front panel kit
↳ Art.No.: 9070001
Details page 278

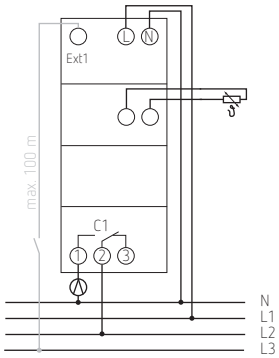


External temperature sensor 1
↳ Art.No.: 9070191
Details page 286



External temperature sensor 2
↳ Art.No.: 9070192
Details page 286

Connection diagrams





RAMSES 816 top2 OT

Description

- Digital mixer control
- 3 different weekly programs
- 3 comfort and 2 reduced temperatures can be allocated to each zone
- INFO button for the most important data
- Party/ECO program
- Chimney sweeping function with push button OT box
- Minimum boiler temperature can be set
- 2-stage burner control option
- Holiday program with reduced temperature or date-controlled heating phase can be programmed e.g. for holiday homes
- USB interface for modem
- Automatic summer/winter time adjustment
- Control of feed temperature via motorcontrolled mixer
- 3-point controller with feed sensor
- Pump protection function
- Inputs: feed sensor heating circuit (contained in set), external sensor
- Elapsed-time counter for recording relay switching times e.g. burner operating time
- Adjustable reminder function for heater maintenance

Product selection

Type of connection	Program	Switching capacity at 250 V AC	Setting range temperature	Operating voltage	Type	Article number
2-way conductor (BUS) room controller	Weekly program	2 x 2 (1) A, 1 x 1 (1) A	+6 °C ... +30 °C	230 V AC	RAMSES 816 top2 OT	8169132

Technical data

RAMSES 816 top2 OT			
Operating voltage	230 V AC	Program	Weekly program
Frequency	50 Hz	Number of memory locations	42
Type of contact	NO contact	Switching hysteresis	2 – 20 K
Switching capacity	2 x 2 (1) A Relay, 1 x 1 (1) A Relay	Mixer runtime	2 – 10 min
Setting range temperature	+6 °C ... +30 °C	Power reserve	4 hours
Flow temperature limit	+40 °C ... +90 °C	Stand-by consumption	1,1 W
Type of connection	2-way conductor (BUS) room controller	Type of protection	IP 20
		Protection class	II according to EN 60 730-1

Accessories



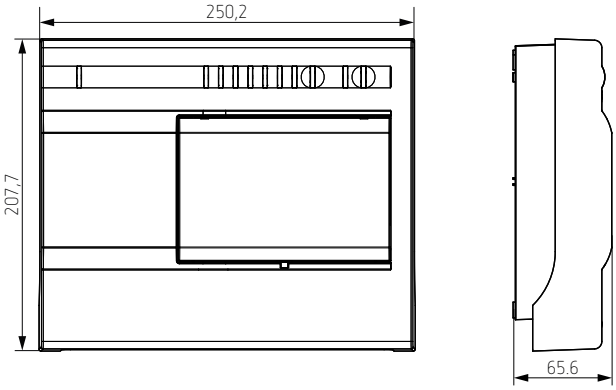
External temperature sensor
↳ Art.No.: 9070463
Details page 287

Temperature sensor RAMSES IP 65
↳ Art.No.: 9070459
Details page 286

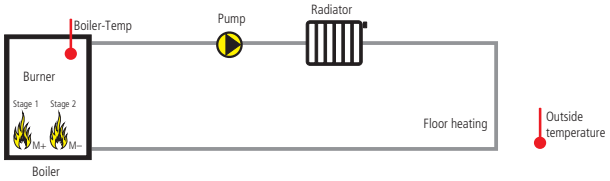


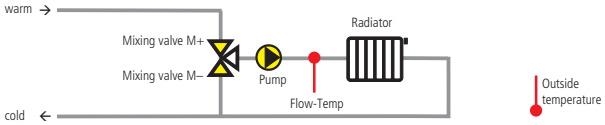
Plunge sensor RAMSES
↳ Art.No.: 9070379
Details page 287

Scale drawings



Connection diagrams





Clock thermostats, OpenTherm



Description

- Digital heating control for time-dependent monitoring and control of room temperature
- Open Therm heating controller for 2 or 3 point control, weather-dependent, service water and circulation control
- Automatic sensor recognition for weather- or room-dependent control; can be switched manually at any time
- 3 different weekly programs
- 3 comfort and 2 reduced temperatures can be allocated to each phase
- INFO button for the most important data
- Additional switching program for domestic hot water utilisation times
- Adjustable service water storage temperature, programmable legionella protection
- Party/ECO program
- Chimney sweeping function with push button OT box
- Minimum boiler temperature can be set
- 2 heating curves can be set for 2 heating circuits
- 2-stage burner control option
- Holiday program with reduced temperature or date-controlled heating phase can be programmed e. g. for holiday homes
- USB interface for modem
- Automatic summer/winter time adjustment
- Boiler/feed temperature (control circuit 1) controlled by switching the burner
- Control of feed temperature (control circuit 2) via pump control or motor-controlled mixer
- 3-point controller with feed sensor
- Time- and temperature-dependent control of hot water circulation pump.
- Pump protection function
- Inputs: External sensor (contained in set), feed sensor heating circuit (contained in set), contact or immersion sensor for domestic hot water, contact sensor for circulation
- Elapsed-time counter for recording relay switching times e.g. burner operating time
- Adjustable reminder function for heater maintenance

Product selection

Type of connection	Program	Switching capacity at 250 V AC	Setting range temperature	Operating voltage	Type	Article number
2-way conductor (BUS) room controller	Weekly program	5 x 5 (1), 2 x 1 (1) A	+6 °C ... +30 °C	230 V AC	RAMSES 856 top2 OT	8569132

Technical data

RAMSES 856 top2 OT			
Operating voltage	230 V AC	Program	Weekly program
Frequency	50 Hz	Number of memory locations	42, max. 24 per program
Type of contact	NO contact	Switching hysteresis	2 – 20 K
Switching capacity	5 x 5 (1) A Relay, 2 x 1 (1) A Relay	Mixer runtime	2 – 10 min
Setting range temperature	+6 °C ... +30 °C	Power reserve	4 hours
Flow temperature limit	+40 °C ... +90 °C	Stand-by consumption	1,1 W
Type of connection	2-way conductor (BUS) room controller	Type of protection	IP 20
		Protection class	II according to EN 60 730-1

Accessories

Temperature sensor RAMSES IP 65
↳ Art.No.: 9070459
Details page 286



Flow temperature sensor RAMSES
↳ Art.No.: 9070371
Details page 287

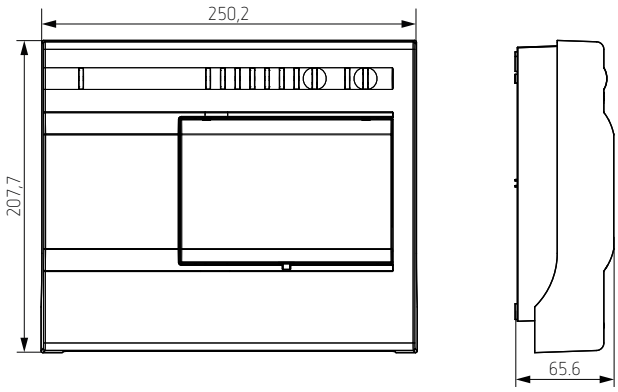


OT-Box Standard
↳ Art.No.: 9070712
Details page 287



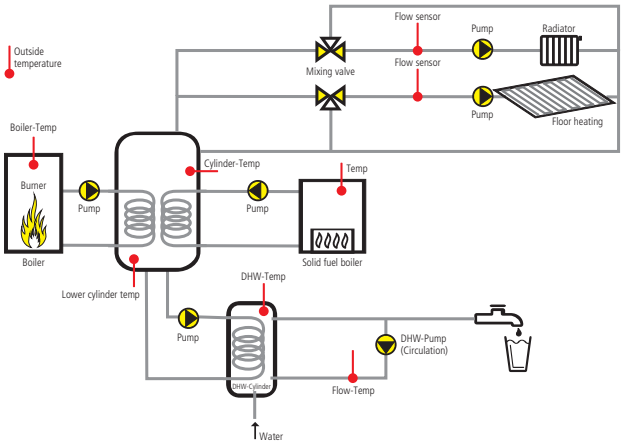
Plunge sensor RAMSES
↳ Art.No.: 9070379
Details page 287

Scale drawings

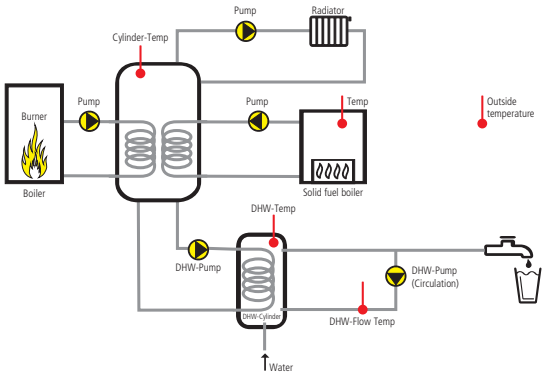


RAMSES 856 top2 OT

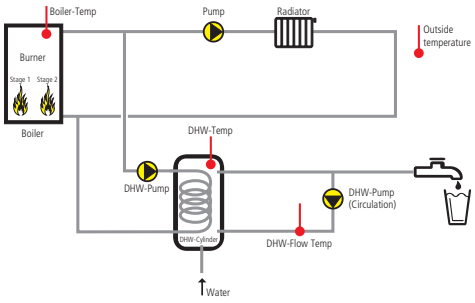
Connection diagrams



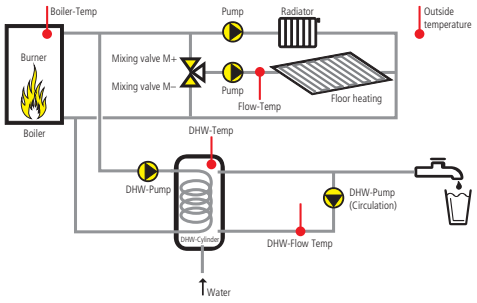
RAMSES 856 top2 OT



RAMSES 856 top2 OT



RAMSES 856 top2 OT



RAMSES 856 top2 OT

9

Clock thermostats, Analogue battery version, Analogue 230 V



RAMSES 784 S

Description

Common functions

- Analogue clock thermostat with a low profile design for time-dependent monitoring and control of room temperature
- Segment program disc with daily program
- Normal and reduced temperature can be set separately
- Operating point and electronic recirculation are set from the front
- Party switch and program display

RAMSES 784 S

- Battery version
- Electronic temperature control
- Quartz mechanism
- Selector switch for operating mode: continuous reduced temperature, continuous normal temperature, automatic mode, frost and plant protection +6 °C
- Battery monitoring with battery replacement indicator via flashing LED
- Silting and pump protection function (option)

RAMSES 722 S

- Mains version
- Synchronous motor drive
- Electronic temperature control
- Selector switch for operating mode: continuous reduced temperature, continuous normal temperature, automatic mode, frost and plant protection +6 °C

Product selection

Power reserve	Type of connection	Program	Type of contact	Setting range temperature	Operating voltage	Type	Article number
–	2/3-way conductors	Daily program	Changeover contact	+10 °C ... +30 °C	2 AA batteries	RAMSES 784 S	7840801
	3-/4-conductors	Daily program	Changeover contact	+10 °C ... +30 °C	230 V AC	RAMSES 722 S	7220801

Technical data

	RAMSES 784 S	RAMSES 722 S
Operating voltage	2 AA batteries	230 V AC
Frequency	–	50 Hz
Type of contact	Changeover contact	
Program	Daily program	
Switching capacity	6 A (at 250 V AC, cos φ = 1), 1 A (at 250 V AC, cos φ = 0.6)	
Switching differential	0,4 – 1,2 K	
Switching output	Potential-free	Potential-free, not for SELV
Setting range temperature	+10 °C ... +30 °C	
Shortest switching times	15 min	
Programmable every	15 min	
Time accuracy at 25 °C	≤ ± 1 s/day (quartz)	Synchronised with mains
Stand-by consumption	–	1,3 W
Battery life	Approx. 1 year, depending on switching frequency	–
Type of protection	IP 20	
Protection class	II according to EN 60 730-1	

Accessories

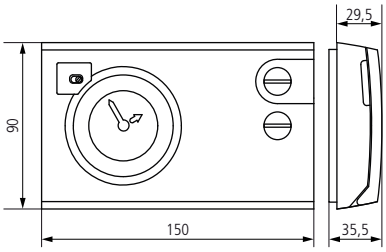


Actuator ALPHA 5 230 V
↳ Art.No.: 9070441
Details page 287

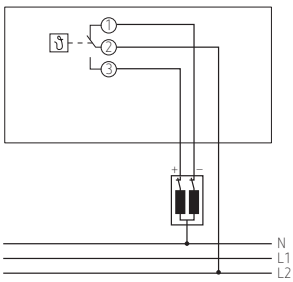
Actuator ALPHA 5 24 V
Details page 288

Adapter RAMSES 72x/78x
Details page 286

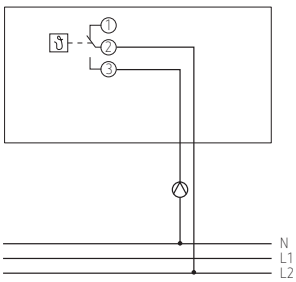
Scale drawings



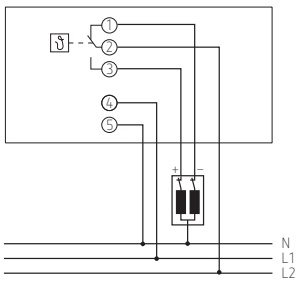
Connection diagrams



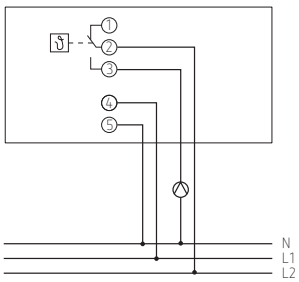
RAMSES 784 S



RAMSES 784 S



RAMSES 722 S



RAMSES 722 S

Clock thermostats, Analogue battery version, Analogue 230 V



RAMSES 784



RAMSES 721

Description

Common functions

- Analogue clock thermostat with a low profile design for time-dependent monitoring and control of room temperature
- Operating point and electronic recirculation are set from the front
- Party switch and program display
- Electronic temperature control
- Selector switch for operating mode: continuous reduced temperature, continuous normal temperature, automatic mode, frost and plant protection +6 °C

RAMSES 784

- Battery version
- Tappet program disc with daily or weekly program
- Normal and reduced temperature can be set separately
- Quartz mechanism
- Battery monitoring with battery replacement indicator via flashing LED
- Silting and pump protection function (option)

RAMSES 722

- Mains version
- Tappet program disc with daily or weekly program
- Synchronous motor drive
- Normal and reduced temperature can be set separately

RAMSES 782

- Mains version
- Tappet program disc with daily or weekly program
- Quartz mechanism, 3 day power reserve
- Normal and reduced temperature can be set separately

RAMSES 721

- Mains version
- Tappet program disc with daily program
- Synchronous motor drive
- Normal temperature can be set
- Reduced temperature approx. 5 K lower in relation to the set comfort temperature
- Without selector switch

RAMSES 725

As RAMSES 722, but:

- Reduced temperature can be set
- Central control of reduced temperature as per time program

Product selection

Power reserve	Type of connection	Program	Type of contact	Setting range temperature	Operating voltage	Type	Article number
–	2/3-way conductors	Daily/weekly program	Changeover contact	+10 °C ... +30 °C	2 AA batteries	RAMSES 784	7840030
	3-/4-conductors	Daily/weekly program	Changeover contact	+10 °C ... +30 °C	230 V AC	RAMSES 722	7220030
3 days	3-/4-conductors	Daily/weekly program	Changeover contact	+10 °C ... +30 °C	230 V AC	RAMSES 782	7820030
–	3-/4-conductors	Daily program	Changeover contact	+10 °C ... +30 °C	230 V AC	RAMSES 721	7210030
		Daily/weekly program	Changeover contact	+10 °C ... +30 °C	230 V AC	RAMSES 725	7250030

Technical data

	RAMSES 784	RAMSES 722	RAMSES 782	RAMSES 721	RAMSES 725
Operating voltage	2 AA batteries	230 V AC			
Frequency	–	50 Hz	50–60 Hz	50 Hz	
Type of contact	Changeover contact				
Program	Daily/weekly program			Daily program	Daily/weekly program
Switching capacity	6 A (at 250 V AC, cos φ = 1), 1 A (at 250 V AC, cos φ = 0.6)				
Switching differential	0,4–1,2 K	0–1,2 K	0,4–1,2 K	1,5 K	
Switching output	Potential-free	Potential-free, not for SELV			
Setting range temperature	+10 °C ... +30 °C				
Shortest switching times	20 min, 120 min			20 min	20 min, 120 min
Programmable every	5 min, 30 min			5 min	5 min, 30 min
Time accuracy at 25 °C	≤ ± 1 s/day (quartz)	Synchronised with mains	≤ ± 1 s/day (quartz)	Synchronised with mains	
Power reserve	–		3 days	–	
Stand-by consumption	–	1,3 W	1,1 W	1,3 W	1,4 W
Battery life	approx. 1 year, depending on switching frequency	–			
Type of protection	IP 20				
Protection class	II according to EN 60 730-1				

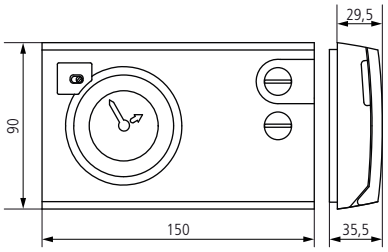
Accessories

Actuator ALPHA 5 230 V
Details page 287

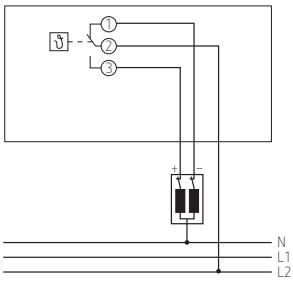
Actuator ALPHA 5 24 V
Details page 288

Adapter RAMSES 72x/78x
Details page 286

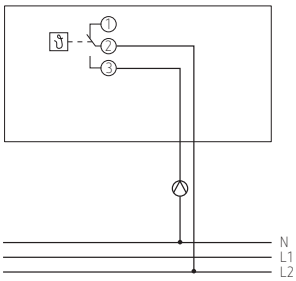
Scale drawings



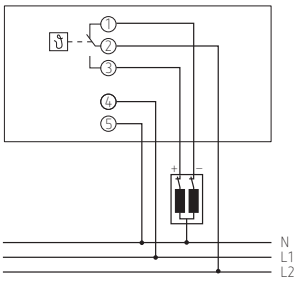
Connection diagrams



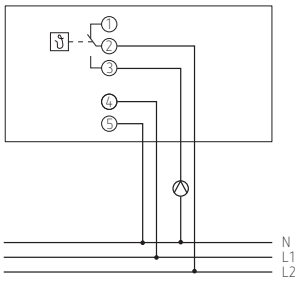
RAMSES 784



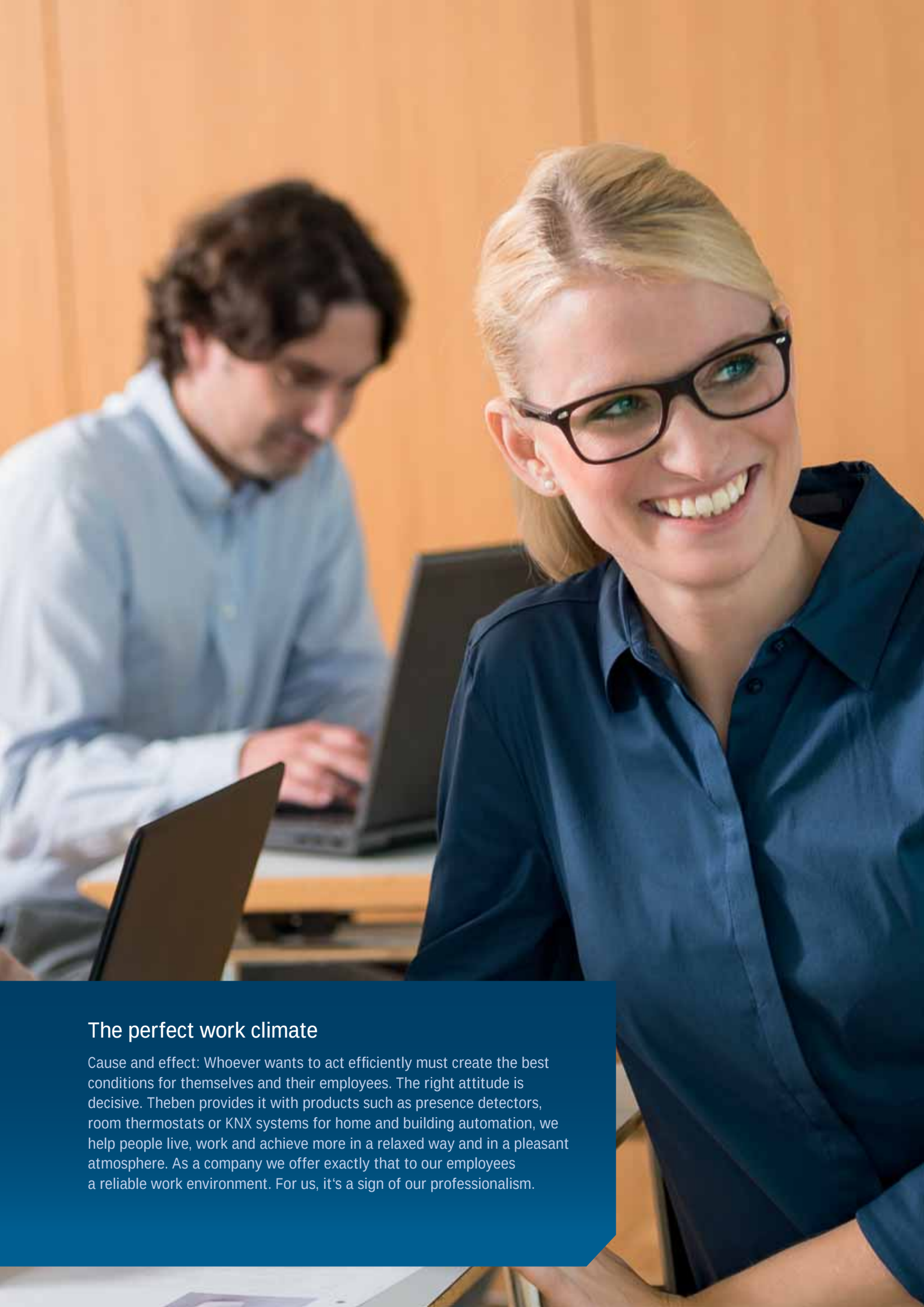
RAMSES 784



RAMSES 722, RAMSES 782, RAMSES 721, RAMSES 725



RAMSES 722, RAMSES 782, RAMSES 721, RAMSES 725



The perfect work climate

Cause and effect: Whoever wants to act efficiently must create the best conditions for themselves and their employees. The right attitude is decisive. Theben provides it with products such as presence detectors, room thermostats or KNX systems for home and building automation, we help people live, work and achieve more in a relaxed way and in a pleasant atmosphere. As a company we offer exactly that to our employees a reliable work environment. For us, it's a sign of our professionalism.

	Type of connection	Switching capacity at 230 V AC	Type of contact	Operating voltage	Installation type	Type	Page
Mechanical							
	2/3-way conductors	10 (4) A	NC contact	230 – 240 V AC	Surface-mounted	RAMSES 701	180
	3-/4-conductors	10 (4) A	NC contact	230 – 240 V AC	Surface-mounted	RAMSES 702	180
						RAMSES 703	180
						RAMSES 704	180
						RAMSES 705	180
	4/5-way conductor	10 (4) A	NC contact	230 – 240 V AC	Surface-mounted	RAMSES 706	180
						RAMSES 707	180
	3-/4-conductors	Heating: 10 (4) A Cooling: 5 (2) A	Changeover contact	230 – 240 V AC	Surface-mounted	RAMSES 708	180
	4/5-way conductor	Heating: 10 (4) A Cooling: 5 (2) A	Changeover contact	230 – 240 V AC	Surface-mounted	RAMSES 709	180
	2/3-way conductors	10 (4) A	NC contact	230 – 240 V AC	Flush-mounted	RAMSES 741	182
	4/5-way conductor	10 (4) A	NC contact	230 – 240 V AC	Flush-mounted	RAMSES 746	182
	3-/4-conductors	Heating: 10 (4) A Cooling: 5 (1) A	Changeover contact	230 – 240 V AC	Flush-mounted	RAMSES 748	182
	2/3-way conductors	10 (4) A	NC contact	230 – 240 V AC	Flush-mounted	RAMSES 741 RA	182
	4/5-way conductor	10 (4) A	NC contact	230 – 240 V AC	Flush-mounted	RAMSES 746 RA	182
	3-/4-conductors	Heating: 10 (4) A Cooling: 5 (1) A	Changeover contact	230 – 240 V AC	Flush-mounted	RAMSES 748 RA	182
Electronic							
	2/3-way conductors	8 A (at 230 V AC, cos φ = 1)	NC contact	230 V AC	Surface-mounted	RAMSES 714	184
	4/5-way conductor	16 A (at 230 V AC, cos φ = 1)	NC contact	230 V AC	Surface-mounted	RAMSES 714 A	184
	5-way conductor	16 (4) A	NO contact	230 V AC	Flush-mounted	RAMSES 751 RA	184

Room thermostats, Mechanical



RAMSES 701 | RAMSES 706 | RAMSES 707

Description

Common functions

- Room temperature controller with thermal feedback
- Suitable for all types of heating, e.g. gas, water, electric heating with central / individual room control
- Setting controller with mechanical setting limit or detection

RAMSES 702

- Integrated temperature reduction (approx. 4 K) possible via control with time switch

RAMSES 703

- Internal setting: Temperature cannot be set externally. Temperature is set inside the device at start-up
- Integrated temperature reduction (approx. 4 K) possible via control with time switch

RAMSES 704

- Switch for additional heating ON / OFF + indicator lamp

RAMSES 705

- Switch for heating ON / OFF

RAMSES 706

- Switch for heating ON / OFF + indicator lamp
- Integrated temperature reduction (approx. 4 K) possible via control with time switch

RAMSES 707

- Switch for heating ON / OFF
- Switch for additional heating ON / OFF + indicator lamp

RAMSES 708

- Also suitable for air conditioning equipment
- Heating / cooling changeover contact

RAMSES 709

- Also suitable for air conditioning equipment
- Heating / cooling changeover contact
- 3-way selector switch for: comfort mode, reduction mode, external reduction
- Indicator lamp
- External temperature reduction (approx. 4 K) possible via control with time switch

10

Product selection

Type of connection	Type of contact	Switching capacity at 230 V AC	Setting range temperature	Operating voltage	Type	Article number
2 / 3-way conductors	NC contact	10 (4) A	+5 °C ... +30 °C	230 – 240 V AC	RAMSES 701	7010001
3- / 4-conductors	NC contact	10 (4) A	+5 °C ... +30 °C	230 – 240 V AC	RAMSES 702	7020001
					RAMSES 703	7030001
					RAMSES 704	7040001
					RAMSES 705	7050001
4 / 5-way conductor	NC contact	10 (4) A	+5 °C ... +30 °C	230 – 240 V AC	RAMSES 706	7060001
					RAMSES 707	7070001
3- / 4-conductors	Changeover contact	Heating: 10 (4) A Cooling: 5 (2) A	+5 °C ... +30 °C	230 – 240 V AC	RAMSES 708	7080001
4 / 5-way conductor	Changeover contact	Heating: 10 (4) A Cooling: 5 (2) A	+5 °C ... +30 °C	230 – 240 V AC	RAMSES 709	7090001

Technical data

	RAMSES 701 - RAMSES 707	RAMSES 708 - RAMSES 709
Operating voltage	230 – 240 V AC	
Frequency	50 – 60 Hz	
Type of contact	NC contact	Changeover contact
Switching capacity	10 A (at 230 V AC, cos φ = 1), 4 A (at 230 V AC, cos φ = 0.6)	Heating: 10 A (at 230 V AC, cos φ = 1), 4 A (at 230 V AC, cos φ = 0.6) Cooling: 5 A (at 230 V AC, cos φ = 1), 2 A (at 230 V AC, cos φ = 0.6)
Setting range temperature	+5 °C ... +30 °C	
Control accuracy	Approx. 1 K, thermal recirculation	
Test approval		
Colour	Pure white (similar to RAL 9010)	
Installation type	Surface-mounted	
Type of protection	IP 30	
Protection class	II according to EN 60 730-1	

Accessories

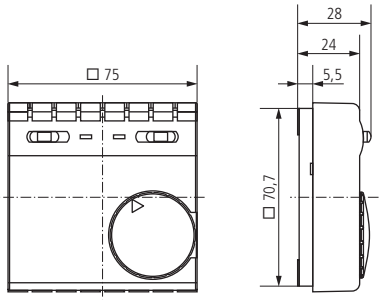


Actuator ALPHA 5 230 V
↳ Art.No.: 9070441
Details page 287

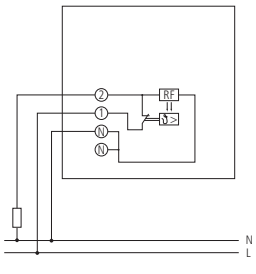


Adapter plate RAMSES 70x
↳ Art.No.: 9070480
Details page 286

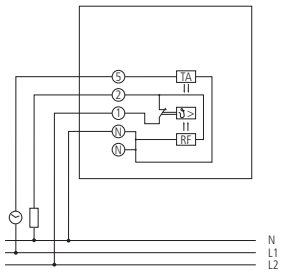
Scale drawings



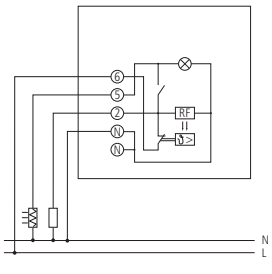
Connection diagrams



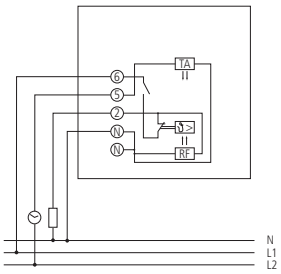
RAMSES 701



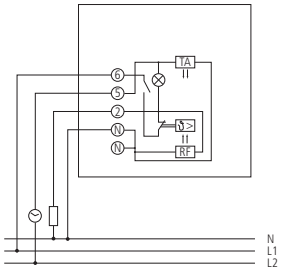
RAMSES 702, RAMSES 703



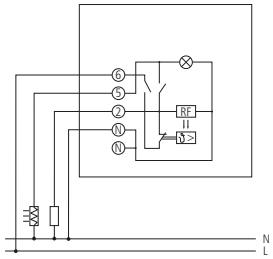
RAMSES 704



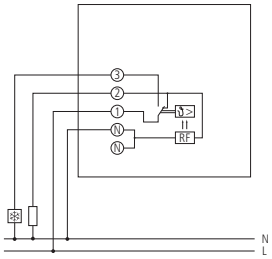
RAMSES 705



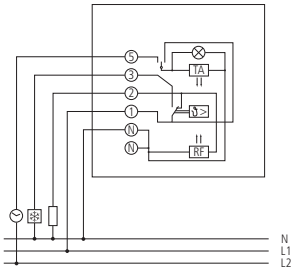
RAMSES 706



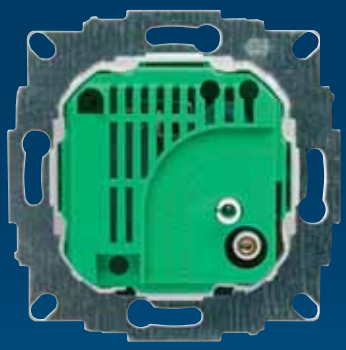
RAMSES 707



RAMSES 708



RAMSES 709



RAMSES 741



RAMSES 741 RA



RAMSES 746 RA

Description

Common functions

- Room temperature controller with thermal feedback
- Central part fits nearly all frames using an adapter frame from the switch manufacturer
- Ideal controller for refurbished and new build properties

RAMSES 741

- Supplied as replacement device without frame, central part and setting button, incl. protective cap
- Frame, central part and setting button available as accessories

RAMSES 746

- Switch for heating ON/OFF + indicator lamp
- Supplied as replacement device without frame, central part and setting button, incl. protective cap
- Frame, central part and setting button available as accessories

RAMSES 748

- Heating/cooling two-way switch
- Supplied as replacement device without frame, central part and setting button, incl. protective cap
- Frame, central part and setting button available as accessories

RAMSES 741 RA

- With frame, central part and setting button

RAMSES 746 RA

- With frame, central part and setting button
- Switch for heating ON/OFF + indicator lamp

RAMSES 748 RA

- Heating/cooling two-way switch
- With frame, central part and setting button

Product selection

10

Scope of delivery	Type of connection	Type of contact	Switching capacity at 230 V AC	Setting range temperature	Operating voltage	Type	Article number
Without cover	2/3-way conductors	NC contact	10 (4) A	+5 °C ... +30 °C	230–240 V AC	RAMSES 741	7410130
	4/5-way conductor	NC contact	10 (4) A	+5 °C ... +30 °C	230–240 V AC	RAMSES 746	7460130
	3-/4-conductors	Changeover contact	Heating: 10 (4) A Cooling: 5 (1) A	+5 °C ... +30 °C	230–240 V AC	RAMSES 748	7480130
With cover	2/3-way conductors	NC contact	10 (4) A	+5 °C ... +30 °C	230–240 V AC	RAMSES 741 RA	7410131
	4/5-way conductor	NC contact	10 (4) A	+5 °C ... +30 °C	230–240 V AC	RAMSES 746 RA	7460131
	3-/4-conductors	Changeover contact	Heating: 10 (4) A Cooling: 5 (1) A	+5 °C ... +30 °C	230–240 V AC	RAMSES 748 RA	7480131

Technical data

	RAMSES 741	RAMSES 746	RAMSES 748	RAMSES 741 RA	RAMSES 746 RA	RAMSES 748 RA
Operating voltage	230–240 V AC					
Frequency	50–60 Hz					
Type of contact	NC contact		Changeover contact	NC contact		Changeover contact
Switching capacity	10 A (at 230 V AC, cos φ = 1), 4 A (at 230 V AC, cos φ = 0.6)		Heating: 10 A (at 230 V AC, cos φ = 1), 4 A (at 230 V AC, cos φ = 0.6) Cooling: 5 A (at 230 V AC, cos φ = 1), 1 A (at 230 V AC, cos φ = 0.6)	10 A (at 230 V AC, cos φ = 1), 4 A (at 230 V AC, cos φ = 0.6)		Heating: 10 A (at 230 V AC, cos φ = 1), 4 A (at 230 V AC, cos φ = 0.6) Cooling: 5 A (at 230 V AC, cos φ = 1), 1 A (at 230 V AC, cos φ = 0.6)
Setting range	+5 °C ... +30 °C					
Control accuracy	approx. 0.5 K, thermal recirculation					
Test approval						
Colour	–			Brilliant pure white (similar to RAL 9010)		
Installation type	Flush-mounted					
Type of protection	–			IP 30		
Protection class	II according to EN 60 730-1					

Accessories



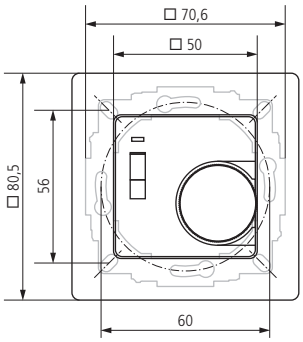
Actuator ALPHA 5 230 V
↳ Art.No.: 9070441
Details page 287

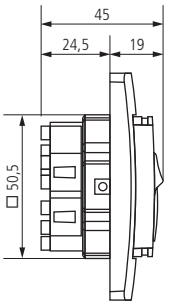
Central part RAMSES 741/748
Details page 288

Central part RAMSES 746
Details page 288

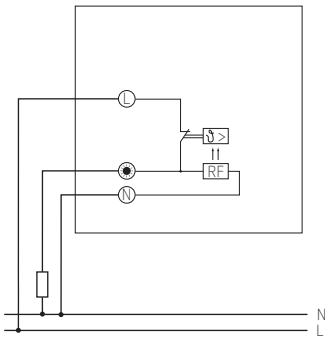
Frame RAMSES 74x
Details page 288

Scale drawings

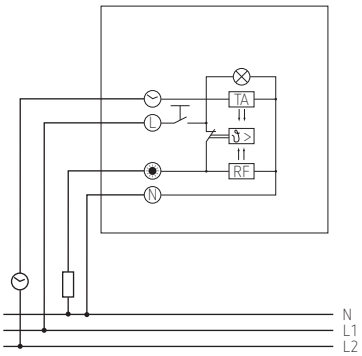




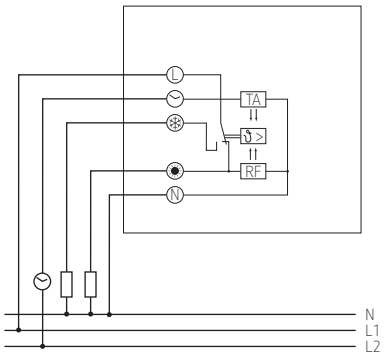
Connection diagrams



RAMSES 741, RAMSES 741 RA



RAMSES 746, RAMSES 746 RA



RAMSES 748, RAMSES 748 RA



RAMSES 714 | RAMSES 714 A | RAMSES 751 RA

Description

RAMSES 714

- Electronic room thermostats for all types of heating, e.g. gas, water, electric heating etc.
- Individual room control possible in combination with Theben actuators
- Heating status display via LED
- External temperature reduction (approx. 3.5 K) is possible via control with time switch. Temperature reduction can be cut to 2 K by opening a wire bridge

RAMSES 714 A

As RAMSES 714, but:

- External temperature sensor for underfloor heating (wet rooms or bathroom heating)
- Switchable for the connection of available NTC sensors (33 KΩ / 25 °C)
- Switch for heating ON / OFF

RAMSES 751 RA

- Electronic room thermostat with remote temperature sensor for underfloor heating control
- Display of temperature reduction and heating ON
- 2-pole mains switch for heating ON / OFF
- Emergency mode for sensor malfunction at 30 % heating
- Central part fits nearly all frames using an adapter frame from the switch manufacturer

Product selection

Type of connection	Type of contact	Switching capacity at 230 V AC	Setting range temperature	Installation type	Type	Article number
2 / 3-way conductors	NC contact	8 A	+5 °C ... +30 °C	Surface-mounted	RAMSES 714	7140002
4 / 5-way conductor	NC contact	16 A	+10 °C ... +60 °C	Surface-mounted	RAMSES 714 A	7140016
5-way conductor	NO contact	16 (4) A	+10 °C ... +50 °C	Flush-mounted	RAMSES 751 RA	7510131

10

Technical data

	RAMSES 714	RAMSES 714 A	RAMSES 751 RA
Operating voltage	230 V AC		
Frequency	50 Hz		
Type of contact	NC contact		NO contact
Switching output	Not potential-free		Potential-free
Switching capacity	8 A (at 230 V AC, cos φ = 1)	16 A (at 230 V AC, cos φ = 1)	16 A (at 230 V AC, cos φ = 1), 4 A (at 230 V AC, cos φ = 0.6)
Setting range temperature	+5 °C ... +30 °C	+10 °C ... +60 °C	+10 °C ... +50 °C
Control accuracy	± 0.25 K	± 0.5 K	
Control behaviour	–		Proportional controller with PWM (continuous type)
Colour	Pure white (similar to RAL 9010)		
Installation type	Surface-mounted		Flush-mounted
Max. cable length	–	Length 4 m, Ø 6 mm, (IP 54)	Length 4 m, Ø 6 mm, extendable to 50 m
Ambient temperature	–		0 °C ... +40 °C
Type of protection	IP 20		IP 30
Protection class	II according to EN 60 730-1		

Additional technical data at: www.theben.de / product / Articlenumber

Accessories

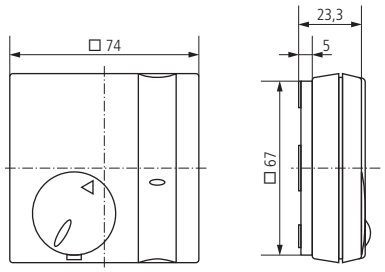


Actuator ALPHA 5 230 V
↳ Art.No.: 9070441
Details page 287

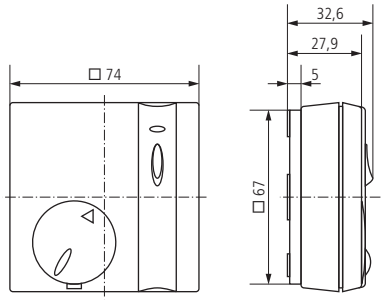


Adapter plate RAMSES 714
for RAMSES 714, RAMSES 714 A
↳ Art.No.: 9070212
Details page 286

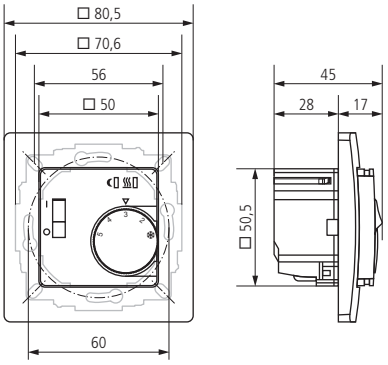
Scale drawings



RAMSES 714

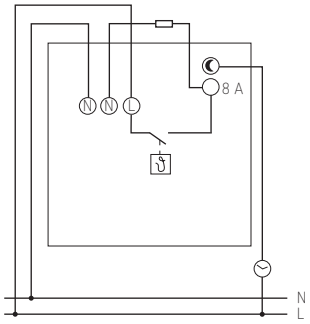


RAMSES 714 A

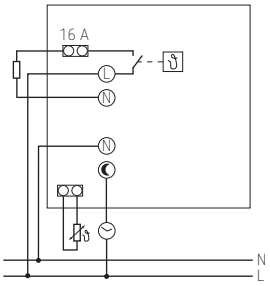


RAMSES 751 RA

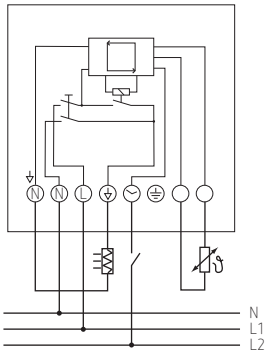
Connection diagrams



RAMSES 714, RAMSES 714 A

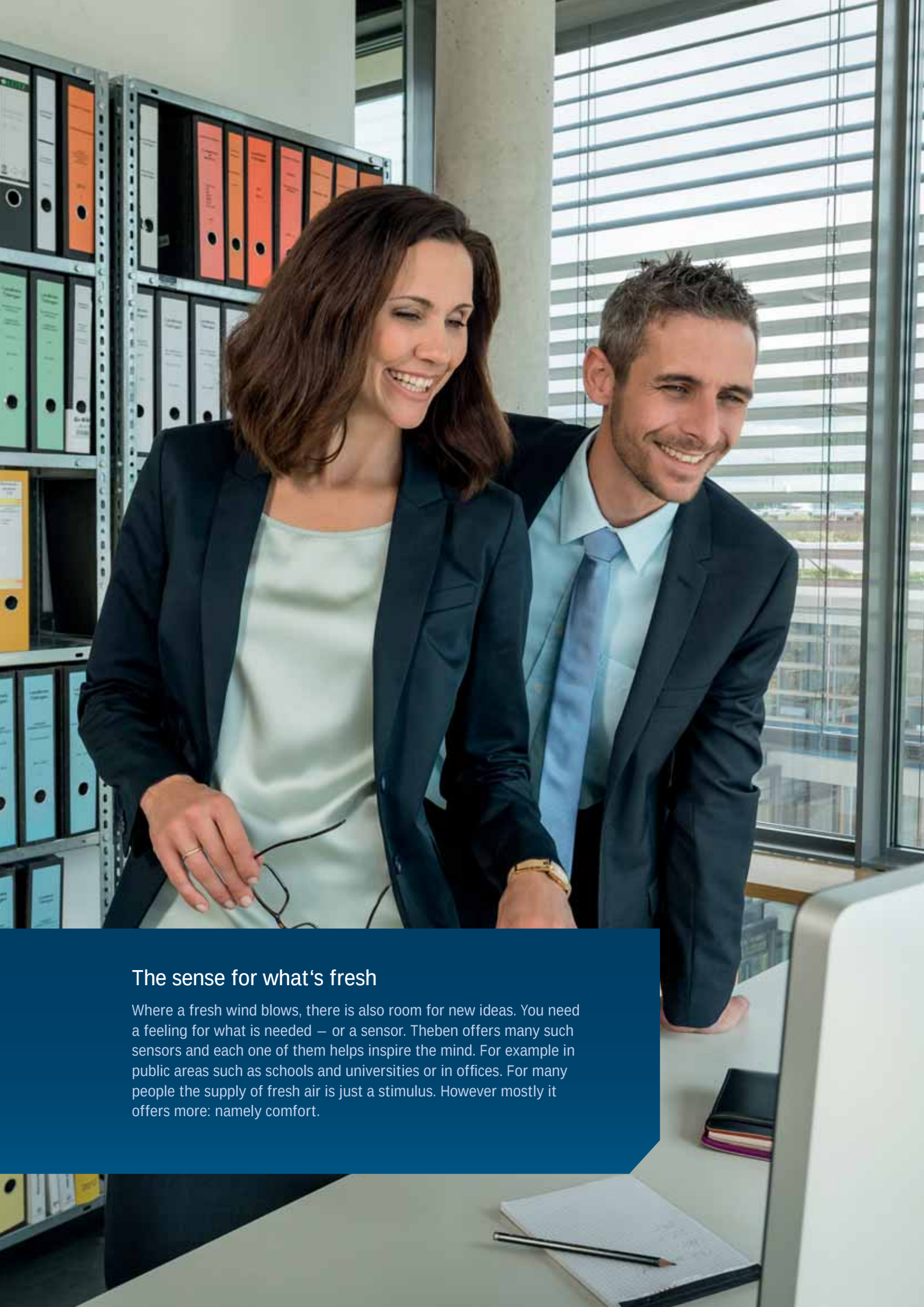


RAMSES 714 A



RAMSES 751 RA

10



The sense for what‘s fresh

Where a fresh wind blows, there is also room for new ideas. You need a feeling for what is needed – or a sensor. Theben offers many such sensors and each one of them helps inspire the mind. For example in public areas such as schools and universities or in offices. For many people the supply of fresh air is just a stimulus. However mostly it offers more: namely comfort.

	Description	Type	Page
CO_2 sensors			
	CO_2 sensor for ventilation control and monitoring of air quality in the room with switch and analog outputs	AMUN 716 R	188
Hygrostat			
	Hygrostat for wall installation for control of humidifiers or ventilation and dehumidifier systems	SOTHIS 715	189

CO_2 sensors, Electronic



AMUN 716 R

Description

- CO_2 sensor
- Suitable for conference and meeting rooms, offices, schools / nurseries, passive and low-energy housing.
- For fan control
- Warning display for CO_2 concentration (lights)
- Power unit optionally available. Power unit is suitable for flush mounted installation
- Simple upgrade of uncontrolled ventilation systems possible
- 2 switch outputs CO_2 controlled for 2 stage control, with manual and automatic mode as well as display of switching status
- 3 x 0–10 V outputs for CO_2, temperature and relative humidity

Product selection

Measuring range	Data interface	Display	Operating voltage	Protection class	Type	Article number
0–2000 ppm	3 x 0–10 V, 2 x relay 5 A / 250 V AC	6 LEDs	24 V AC / DC	II	AMUN 716 R	7160101

Technical data

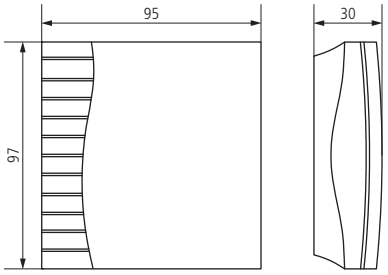
AMUN 716 R			
Operating voltage	24 V AC / DC SELV	ON / OFF thresholds	700 ppm ±200 ppm, 1300 ppm ±200 ppm
Outputs	3 x 0–10 V, 2 x relay 5 A / 250 V AC	Type of connection	Screw terminals
Measuring range CO_2	0–2000 ppm	Display	6 LEDs
Measuring range temperature	+5 °C ... +40 °C	Installation type	Wall installation (also on flush-mounted socket possible)
Measuring range humidity	30–80 % rH	Type of protection	IP 20
Hysteresis	±75 ppm	Protection class	II according to EN 60 730-1

Accessories



Power unit CO2-sensor
↳ Art.No.: 9070494
Details page 288

Scale drawings



AMUN 716 R



SOTHIS 715

Description

- Hygrostat for wall installation
- Measurement of relative humidity
- Suitable for control of humidifiers or ventilation and dehumidifier systems
- Use SELV when there is a risk of high humidity and the build up of condensation

Product selection

Measuring range	Type of contact	Switching capacity humidifier	Switching capacity dehumidyfing	Type	Article number
35–100 % rH	Changeover contact	2 A	5 A	SOTHIS 715	7150002

Technical data

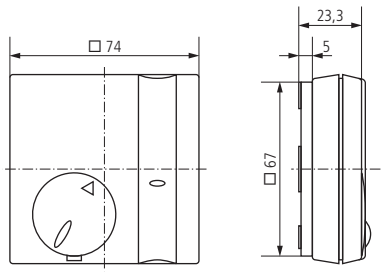
SOTHIS 715			
Switching capacity dehumidyfing	5 A	Installation type	Wall installation
Switching capacity humidifier	2 A	Type of protection	IP 30
Suitable for SELV	Yes	Protection class	II according to EN 60 730-1
Colour	Pure white (similar to RAL 9010)		

Accessories



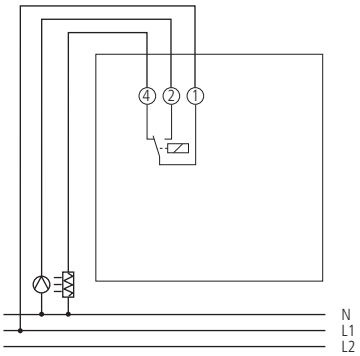
Adapter plate RAMSES 714
↳ Art.No.: 9070212
Details page 286

Scale drawings



SOTHIS 715

Connection diagrams



SOTHIS 715



How innovation arises

Progress thrives on exchanging and from intelligently developing what's already proved itself or applying it to other spheres. Theben is an example of that. Over and over again, through changes in technology, we have pushed open the door to new areas and thus successfully completed the transformation from mechanical to electromechanical systems and digital technology to systems based on bus technology. Behind that lies the competence of our employees - and we do everything to promote that. Because that is the precondition for developing innovations.

	Description	Type	Page
Switching actuators			
	Switching actuators	RMG 4 U KNX/RME 4 U KNX/ RM 4 U KNX/RMG 8 S KNX/RME 8 S KNX/ RM 8 S KNX/RM 16 S KNX/RMG 4 I KNX/RME 4 I KNX/RM 4 I KNX/RM 8 I KNX/ RMG 8 T KNX/RME 8 T KNX/RM 8 T KNX/RM 16 T KNXX	192
Blinds actuators			
	Blinds actuators	JMG 4 T KNX/JME 4 T KNX/JM 4 T KNX/JM 8 T KNX/JMG 4 T 24V KNX/ JME 4 T 24V KNX/JM 4 T 24V KNX/JM 8 T 24V KNX	200
Dimming actuators			
	Universal dimming actuators	DMG 2 T KNX/DME 2 T KNX/DMB 1 T KNX/DM 2 T KNX/DM 4 T KNX	204
	Control units	SMG 2 S KNX/SME 2 S KNX	206
Binary inputs			
	Binary inputs	BMG 6 T KNX/BME 6 T KNX/BM 6 T KNX/BM 12 T KNX	208
	Binary inputs for flush-mounted sockets	TA 2 KNX/TA 4 KNX/TA 6 KNX	210
HVAC controler			
	Multifunction display and room thermostats	VARIA 826 S KNX/RAMSES 713 S KNX/RAMSES 712 KNX	211
	Heating actuators	HMG 6 T KNX/HME 6 T KNX/HM 6 T KNX/HM 12 T KNX/HMT 6 KNX/HMT 12 KNX	216
	Motor-driven actuators	CHEOPS control KNX/CHEOPS drive KNX	218
	CO_2 Room air sensor	AMUN 716 KNX	219
	Room thermostat Fan-Coil and Fan-Coil actuator	RAMSES 713 FC KNX/FCA 1 KNX	220
Presence and motion detectors			
	Presence detectors	PresenceLight 360 KNX/compact passage KNX/compact passimo KNX/ thePrema KNX/theRonda P KNX/PlanoCentro KNX/PlanoSpot KNX/ PresenceLight 180 KNX	222
	Motion detectors	theLuxa P KNX/SPHINX 331 S KNX/SPHINX 332 S KNX/theMova S360 KNX/ theMova P360 KNX	236
Weather station, brightness sensor			
	Weather stations KNX	Meteodata 140 S KNX/Meteodata 139 KNX	242
	Brightness and temperature sensors	LUNA 134 KNX/LUNA 131 S KNX/LUNA 133 KNX	245
Digital time switches			
	8 channel time switch with yearly and astro program	TR 648 top2 RC KNX/TR 648 top2 RC-DCF KNX	248
Gateways			
	KNX-DALI-interface	DALI Gateway KNX	252
	KNX-OpenTherm-Gateway	KNX-OT-Box	253
System devices			
	Time transmitter, supply voltage	ZS 600 DCF KNX, Power supply S KNX 640 mA/320 mA/160 mA	250
	Interface and line coupler	Interface USB KNX/Line coupler S KNX	255
Display units			
	KNX indoor clocks	OSIRIA KNX	256
Visualisation			
	KNX-Visualisation	theServa S110	258
			



RMG 4 U KNX



RME 4 U KNX



RM 4 U KNX

Description

Common functions

- Switching actuator
- LED switching status display for each channel
- Manual operation on device (even without bus connection)
- Switching functions: On/Off, pulse, On/Off delay, staircase light with warning
- Logical links: e.g. lock, AND, release, OR
- Adjustable characteristics: e.g. switching, delayed switching, pulse function
- Links, type of contact (NC contact/NO contact) and participation in central commands such as continuous On, continuous Off, central switching and save/call up scene

RMG 4 U KNX

- 4-way switching actuator MIX2
- Base module MIX2
- Can be upgraded to maximum of 12 channels
- Up to two extension modules MIX or MIX2 can be connected to one base module
- Device and KNX bus module can be swapped independently of each other
- Removable KNX bus module enables devices to be changed without reprogramming
- Manual set-up and use of switching actuators is possible without KNX bus module

RME 4 U KNX

- 4-way switching actuator MIX2
- Extension module MIX2
- For upgrading to maximum of 12 channels

RM 4 U KNX

- 4-way switching actuator

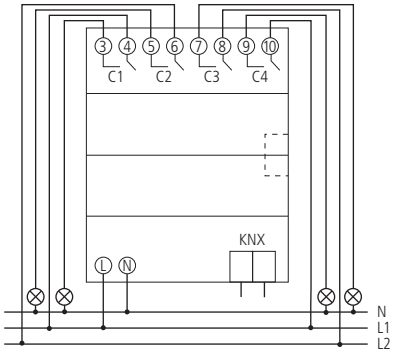
Product selection

Type	Article number
RMG 4 U KNX	4930223
RME 4 U KNX	4930228
RM 4 U KNX	4940223

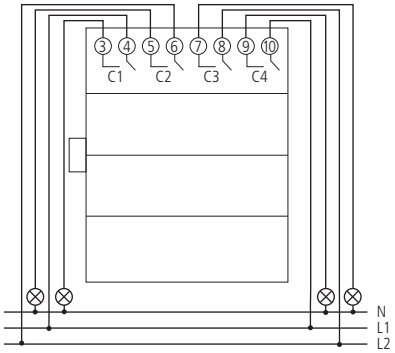
Technical data

	RMG 4 U KNX	RME 4 U KNX	RM 4 U KNX
Operating voltage KNX	Bus voltage, ≤ 4 mA	–	Bus voltage, ≤ 4 mA
Operating voltage	110–240 V AC	–	110–240 V AC
Frequency	50–60 Hz	–	50–60 Hz
Stand-by consumption	0,3 W	0,2 W	0,2 W
Width	4 modules		
Type of contact	NO contact, 16 A (cos φ = 1), 3 A (cos φ = 0,6)		
Fluorescent lamp load (electronic ballast)	1200 W		
Energy saving lamps	300 W		
LED lamp < 2 W	55 W		
LED lamp 2–8 W	180 W		
LED lamp > 8 W	200 W		
Ambient temperature	–5 °C ... +45 °C		
Type of protection	IP 20		
Protection class	II		

Connection diagrams



RMG 4 U KNX, RM 4 U KNX



RME 4 U KNX



RMG 4 I KNX



RME 4 I KNX



RM 8 I KNX

Description

Common functions

- C load switching actuator
- With current recognition
- For higher lamp loads
- LED switching status display for each channel
- Manual operation on device (even without bus connection)
- Switching functions: On/Off, pulse, On/Off delay, staircase light with warning
- Logical links: e.g. lock, AND, release, OR
- Adjustable characteristics: e.g. switching, delayed switching, pulse function
- Links, type of contact (NC contact/NO contact) and participation in central commands such as continuous On, continuous Off, central switching and save/call up scene

RMG 4 I KNX

- 4-way C load switching actuator MIX2
- Base module MIX2
- Can be upgraded to maximum of 12 channels
- Up to two extension modules MIX or MIX2 can be connected to one base module
- Device and KNX bus module can be swapped independently of each other
- Removable KNX bus module enables devices to be changed without reprogramming
- Manual set-up and use of switching actuators is possible without KNX bus module

RME 4 I KNX

- 4-way C load switching actuator MIX2
- Extension module MIX2
- For upgrading to maximum of 12 channels

RM 8 I KNX

- 8-way C load switching actuator

RM 4 I KNX

- 4-way C load switching actuator

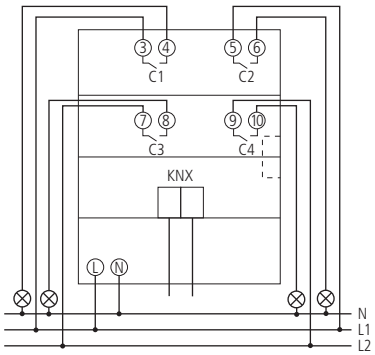
Product selection

Function	Type	Article number
MIX2 Base module	RMG 4 I KNX	4930210
MIX2 Extension module	RME 4 I KNX	4930215
FIIX1 module	RM 4 I KNX	4940210
FIIX2 module	RM 8 I KNX	4940215

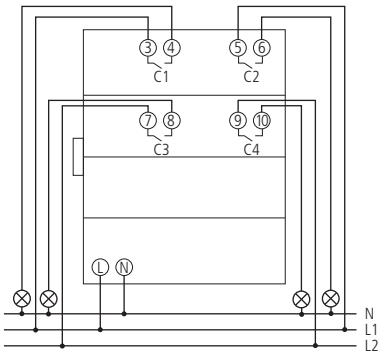
Technical data

	RMG 4 I KNX	RME 4 I KNX	RM 8 I KNX	RM 4 I KNX
Operating voltage KNX	Bus voltage, ≤ 4 mA	–	Bus voltage, ≤ 4 mA	
Operating voltage	110–240 V AC			
Frequency	50–60 Hz			
Stand-by consumption	1,3 W	1,1 W	2,4 W	1,3 W
Width	4 modules		8 modules	4 modules
Type of contact	NO contact, 16 A (cos φ = 1), 10 A (cos φ = 0,6)			
Fluorescent lamp load (electronic ballast)	1650 W			
Energy saving lamps	410 W			
LED lamp < 2 W	75 W			
LED lamp 2–8 W	250 W			
LED lamp > 8 W	300 W			
Ambient temperature	–5 °C … +45 °C			
Type of protection	IP 20			
Protection class	II according to EN 60 669			

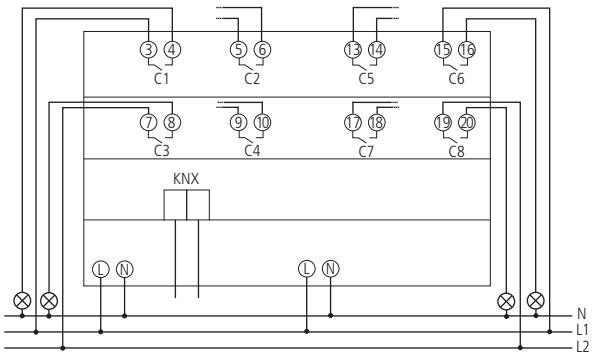
Connection diagrams



RMG 4 I KNX, RM 4 I KNX



RME 4 I KNX



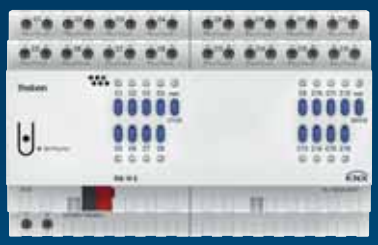
RM 8 I KNX



RMG 8 S KNX



RME 8 S KNX



RM 16 S KNX

NEW

Description

Common functions

- Switching actuator
- LED switching status display for each channel
- Manual operation on device (even without bus connection)
- Switching functions: On/Off, pulse, On/Off delay, staircase light with warning
- Logical links: e.g. lock, AND, release, OR
- Adjustable characteristics: e.g. switching, delayed switching, pulse function
- Links, type of contact (NC contact/NO contact) and participation in central commands such as continuous On, continuous Off, central switching and save/call up scene

RMG 8 S KNX

- 8-way switching actuator MIX2
- Base module MIX2
- Can be upgraded to maximum of 24 channels
- Up to two extension modules MIX or MIX2 can be connected to one base module
- Device and KNX bus module can be swapped independently of each other
- Removable KNX bus module enables devices to be changed without reprogramming
- Manual set-up and use of switching actuators is possible without KNX bus module

RME 8 S KNX

- 8-way switching actuator MIX2
- Extension module MIX2
- For upgrading to maximum of 24 channels

RM 8 S KNX

- 8-way switching actuator

RM 16 S KNX

- 16-way switching actuator

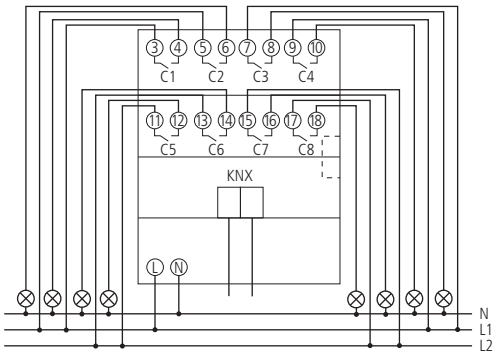
Product selection

Function	Type	Article number
MIX2 Base module	RMG 8 S KNX	4930220
MIX2 Extension module	RME 8 S KNX	4930225
FIIX1 module	RM 8 S KNX	4940220
FIIX2 module	RM 16 S KNX	4940225

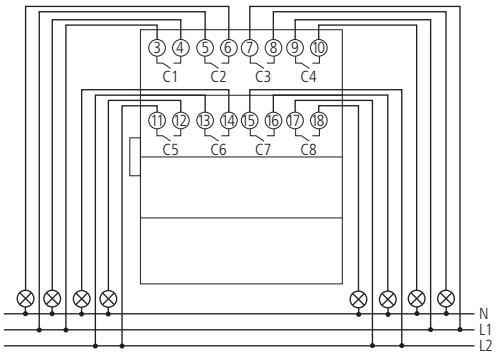
Technical data

	RMG 8 S KNX	RME 8 S KNX	RM 8 S KNX	RM 16 S KNX
Operating voltage KNX	Bus voltage, ≤ 4 mA	–	Bus voltage, ≤ 4 mA	
Operating voltage	110 – 240 V AC	–	110 – 240 V AC	
Frequency	50 – 60 Hz	–	50 – 60 Hz	
Stand-by consumption	0,3 W	0,2 W	0,3 W	
Width	4 modules			
Type of contact	NO contact, 16 A (cos φ = 1), 3 A (cos φ = 0,6)			
Fluorescent lamp load (electronic ballast)	1200 W			
Energy saving lamps	300 W			
LED lamp < 2 W	55 W			
LED lamp 2 – 8 W	180 W			
LED lamp > 8 W	200 W			
Ambient temperature	– 5 °C ... +45 °C			
Type of protection	IP 20			
Protection class	II			

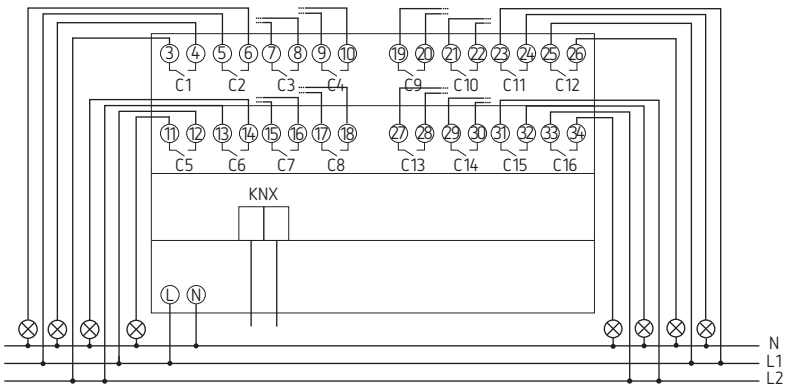
Connection diagrams



RMG 8 S KNX, RM 8 S KNX



RME 8 S KNX



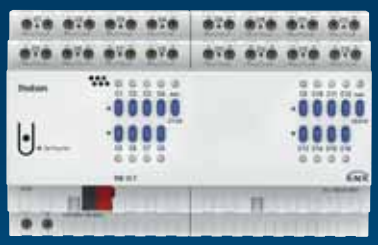
RM 16 S KNX



RMG 8 T KNX



RME 8 T KNX



RM 16 T KNX

Description

Common functions

- Switching or blind actuator
- Flexible channel function selection as switching actuator or for controlling drives for blinds,shutters, sun and vision protection devices, skylights and ventilation flaps
- LED switching status display for each channel
- Manual operation on device (even without bus connection)
- Switching functions: On/Off, pulse, On/Off delay, staircase light with warning
- Logical links: e.g. lock, AND, release, OR
- Adjustable characteristics: e.g. switching, delayed switching, pulse function
- Links, type of contact (NC contact/NO contact) and participation in central commands such as continuous On, continuous Off, central switching and save/call up scene

RMG 8 T KNX

- 8-way switching or 4-way blind actuator MIX2
- Base module MIX2
- Can be upgraded to maximum of 24 channels
- Up to two extension modules MIX or MIX2 can be connected to one base module
- Device and KNX bus module can be swapped independently of each other
- Removable KNX bus module enables devices to be changed without reprogramming
- Manual set-up and use of actuator is possible without KNX bus module

RME 8 T KNX

- 8-way switching or 4-way blind actuator MIX2
- Extension module MIX2
- For upgrading to maximum of 24 channels

RM 8 T KNX

- 8-way switching or 4-way blind actuator

RM 16 T KNX

- 16-way switching or 8-way blind actuator

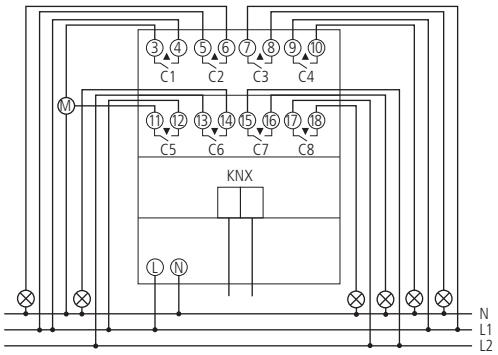
Product selection

Function	Type	Article number
MIX2 Base module	RMG 8 T KNX	4930200
MIX2 Extension module	RME 8 T KNX	4930205
FIIX1 module	RM 8 T KNX	4940200
FIIX2 module	RM 16 T KNX	4940205

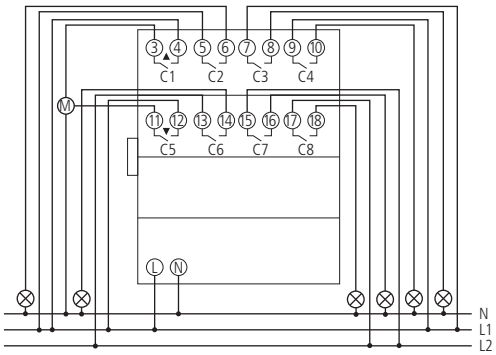
Technical data

	RMG 8 T KNX	RME 8 T KNX	RM 16 T KNX	RM 8 T KNX
Operating voltage KNX	Bus voltage, ≤ 4 mA	–	Bus voltage, < 4 mA	
Operating voltage	110 – 240 V AC	–	110 – 240 V AC	
Frequency	50 – 60 Hz	–	50 – 60 Hz	
Stand-by consumption	0,3 W	0,2 W	0,5 W	
Width	4 modules		8 modules	4 modules
Type of contact	NO contact, 16 A (cos φ = 1), 3 A (cos φ = 0,6)			
Fluorescent lamp load (electronic ballast)	1200 W			
Energy saving lamps	300 W			
LED lamp < 2 W	55 W			
LED lamp 2 – 8 W	180 W			
LED lamp > 8 W	200 W			
Ambient temperature	– 5 °C ... +45 °C			
Type of protection	IP 20			
Protection class	II according to EN 60 669			

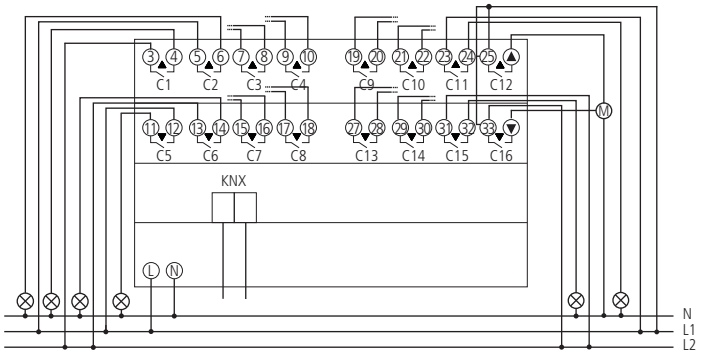
Connection diagrams



RMG 8 T KNX, RM 8 T KNX



RME 8 T KNX



RM 16 T KNX

12



JMG 4 T KNX



JME 4 T KNX



JM 8 T KNX

Description

Common functions

- Blind actuator
- For controlling drives for blinds, shutters, sun and vision protection devices, skylights and ventilation flaps
- Manual operation on device (even without bus connection)
- LED Up and Down switching status display for each channel
- Potential-free contacts for Up and Down per channel
- Copy function for fast configuration
- Setting option for phase sequence and running time of devices

JMG 4 T KNX

- 4-way blind actuator MIX2
- Base module MIX2
- Can be upgraded to maximum of 12 channels
- Up to 2 extension modules can be connected to a base module
- Up to two extension modules MIX or MIX2 can be connected to one base module
- Device and KNX bus module can be swapped independently of each other
- Removable KNX bus module enables devices to be changed without reprogramming
- Manual set-up and use of actuators is possible without KNX bus module
- Free combination of switches, dimming, blinds and heating control as well as binary inputs

JME 4 T KNX

- 4-way blind actuator MIX2
- Extension module MIX2
- Can be upgraded to maximum of 12 channels

JM 4 T KNX

- 4-way blind actuator

JM 8 T KNX

- 8-way blind actuator

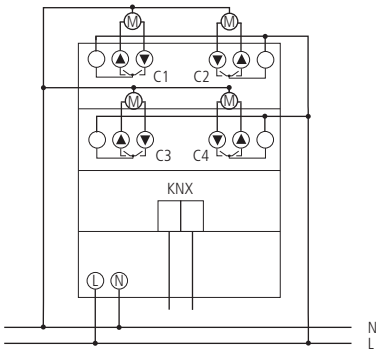
Product selection

Function	Type	Article number
MIX2 Base module	JMG 4 T KNX	4930250
MIX2 Extension module	JME 4 T KNX	4930255
FIIX1 module	JM 4 T KNX	4940250
FIIX2 module	JM 8 T KNX	4940255

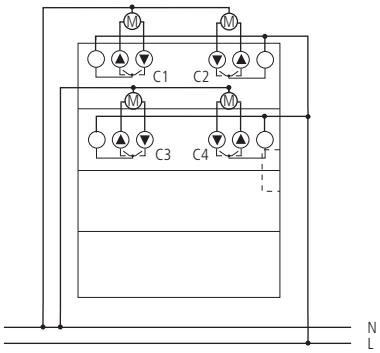
Technical data

	JMG 4 T KNX	JME 4 T KNX	JM 8 T KNX	JM 4 T KNX
Operating voltage KNX	Bus voltage, < 4 mA	–	Bus voltage, ≤ 4 mA	
Operating voltage	110 – 240 V AC	–	110 – 240 V AC	
Stand-by consumption	0,3 W	0,2 W	0,5 W	0,3 W
Frequency	50 – 60 Hz	–	50 – 60 Hz	
Width	4 modules		8 modules	4 modules
Type of contact	NO contact, 6 A (cos φ = 1)			
Ambient temperature	– 5 °C ... +45 °C			
Type of protection	IP 20			
Protection class	II according to EN 60 669			

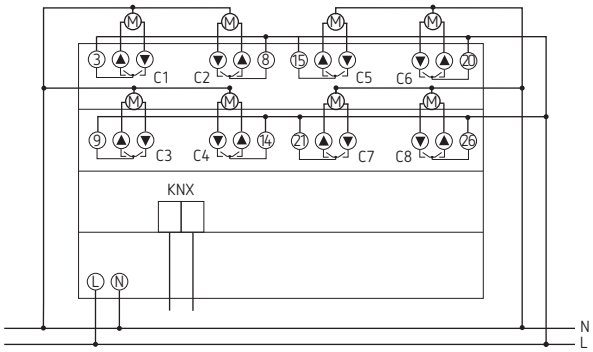
Connection diagrams



JMG 4 T KNX, JM 4 T KNX



JME 4 T KNX



JM 8 T KNX

12



JMG 4 T 24V KNX



JME 4 T 24V KNX



JM 8 T 24V KNX

Description

Common functions

- Blind actuator
- For controlling 24V drives for blinds, shutters, sun and vision protection devices, skylights and ventilation flaps
- Manual operation on device (even without bus connection)
- LED Up and Down switching status display for each channel
- Potential-free contacts for Up and Down per channel
- Setting option for phase sequence and running time of deives
- Copy function for fast configuration

JMG 4 T 24V KNX

- 4-way blind actuator MIX2
- Base module MIX2
- Can be upgraded to maximum of 12 channels
- Up to 2 extension modules can be connected to a base module
- Up to two extension modules MIX or MIX2 can be connected to one base module
- Device and KNX bus module can be swapped independently of each other
- Removable KNX bus module enables devices to be changed without reprogramming
- Manual set-up and use of actuators is possible without KNX bus module
- Free combination of switches, dimming, blinds and heating control as well as binary inputs

JME 4 T 24V KNX

- 4-way blind actuator MIX2
- Extension module MIX2
- Can be upgraded to maximum of 12 channels

JM 4 T 24V KNX

- 4-way blind actuator

JM 8 T 24V KNX

- 8-way blind actuator

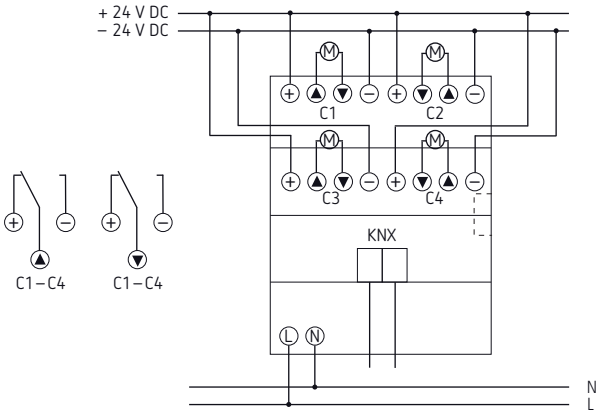
Product selection

Function	Type	Article number
MIX2 Base module	JMG 4 T 24V KNX	4930260
MIX2 Extension module	JME 4 T 24V KNX	4930265
FIIX1 module	JM 4 T 24V KNX	4940260
FIIX2 module	JM 8 T 24V KNX	4940265

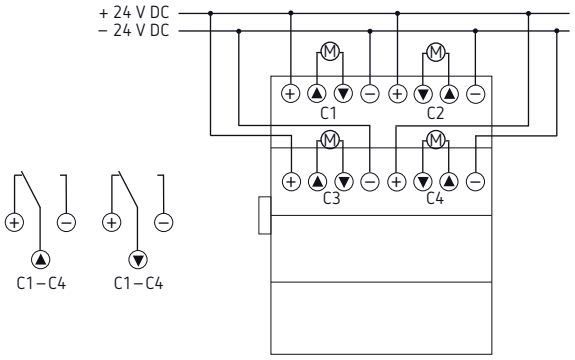
Technical data

	JMG 4 T 24V KNX	JME 4 T 24V KNX	JM 4 T 24V KNX	JM 8 T 24V KNX
Operating voltage KNX	Bus voltage, 4 mA	–	Bus voltage, 4 mA	
Operating voltage	110–240 V AC	–	110–240 V AC	
Stand-by consumption	0,3 W	–	0,3 W	0,5 W
Frequency	50–60 Hz	–	50–60 Hz	
Width	4 modules			8 modules
Type of contact	Changeover contact			
Switching capacity	6 A (at 24 V DC)			
Ambient temperature	–5 °C ... +45 °C			
Type of protection	IP 20			
Protection class	II according to EN 60 730-1			

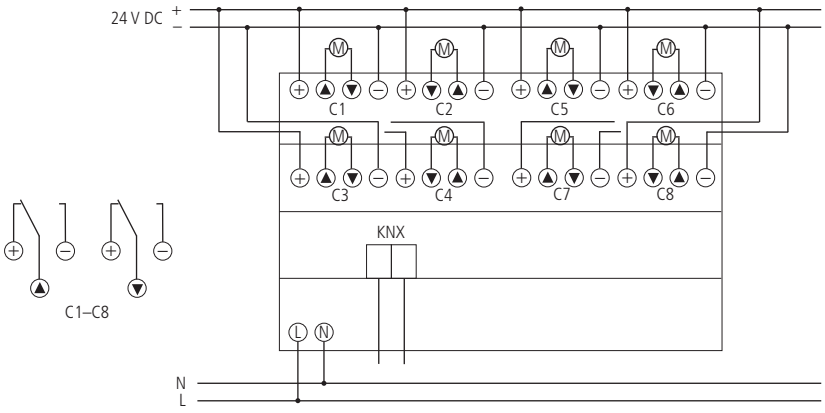
Connection diagrams



JMG 4 T 24V KNX, JM 4 T 24V KNX



JME 4 T 24V KNX



JM 8 T 24V KNX



DMG 2 T KNX



DME 2 T KNX



DM 4 T KNX

Description

Common functions

- Universal dimmer actuator
- For dimming dimmable LED, incandescent lamps, LV, HV halogen lamps and Energy saving lamps
- Also suitable for dimming of dimmable energy-saving lamps
- Also suitable for controlling fans
- LED switching status display for each channel
- Manual operation on device (even without bus connection)
- The dimming output can be upgraded by using additional dimmboosters „DMB 1 T KNX" - dimming output 300 W/VA for each dimmbooster. Output to a maximum of 2000 W/VA by using max. 4 boosters possible
- Automatic load detection (can be deactivated)
- For R, L and C loads

DMG 2 T KNX

- 2-way universal dimmer actuator MIX2
- Base module MIX2
- Can be upgraded to maximum of 6 channels
- Up to two extension modules MIX or MIX2 can be connected to one base module
- Device and KNX bus module can be swapped independently of each other
- Removable KNX bus module enables devices to be changed without reprogramming
- Manual set-up and use of switching actuators is possible without KNX bus module
- Dimming output: 400 W/VA per channel or 800 W/VA in parallel operation

DME 2 T KNX

- 2-way universal dimmer actuator MIX2
- Extension module MIX2
- For upgrading to maximum of 6 channels

DM 2 T KNX

- 2-way universal dimmer actuator

DM 4 T KNX

- 4-way universal dimmer actuator

DMB 1 T KNX

- 1 channel dimming output extension module ‚Dimmbooster'
- For extending the output of base and extension dimming actuators for 300 W/VA per channel. Extending output to a maximum of 2000 W/VA by using max. 4 boosters possible

Product selection

Function	Type	Article number
MIX2 Base module	DMG 2 T KNX	4930270
MIX2 Extension module	DME 2 T KNX	4930275
FIIX1 module	DM 2 T KNX	4940270
FIIX2 module	DM 4 T KNX	4940275
Dimmbooster	DMB 1 T KNX	4930279

12

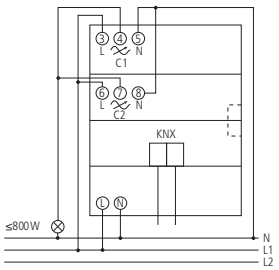
Technical data

	DMG 2 T KNX	DME 2 T KNX	DM 4 T KNX	DM 2 T KNX	DMB 1 T KNX
Operating voltage KNX	Bus voltage, ≤ 4 mA	–	Bus voltage, ≤ 4 mA		–
Operating voltage	230 V AC				
Frequency	50 Hz				
Stand-by consumption	0,9 W	0,6 W	1,5 W	–	0,2 W
Width	4 modules		8 modules	4 modules	1 modules

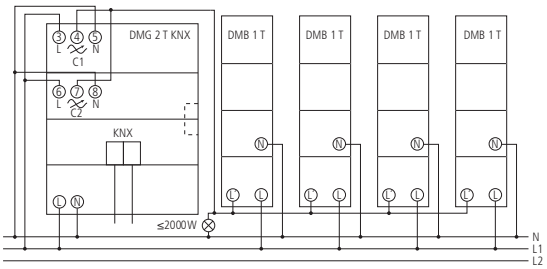
Additional technical data at: www.theben.de/product/ Articlenumber

	DMG 2 T KNX	DME 2 T KNX	DM 4 T KNX	DM 2 T KNX	DMB 1 T KNX
Lamp types	Incandescent, low-voltage and high-voltage halogen and dimmable energy saving lamps and LED				Incandescent, low-voltage and high-voltage halogen and dimmable LED
Switching capacity per channel	400 W				300 W / VA
Switching capacity in parallel operation	800 W				–
Switching capacity dimmable energy saving lamps per channel	80 W				–
Switching capacity dimmable energy saving lamps in parallel operation	140 W		–		
Switching capacity dimmable 230 V LED per channel	60 W				45 W
Switching capacity dimmable 230 V LED in parallel operation	120 W		–		45 W
Switching capacity min.	5 W				
Ambient temperature	–5 °C ... +45 °C				
Type of protection	IP 20				
Protection class	II according to EN 60 669				

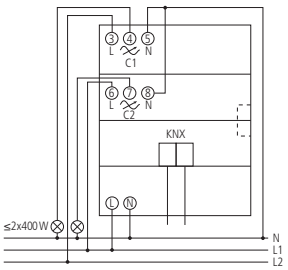
Connection diagrams



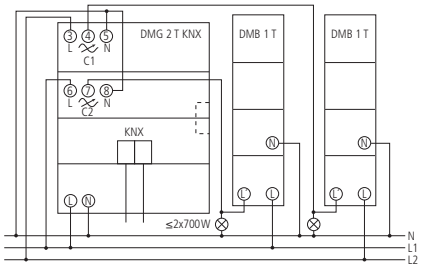
DMG 2 T KNX, DM 2 T KNX



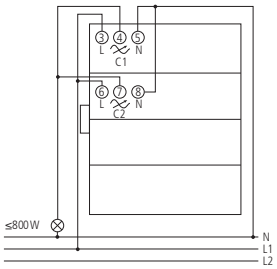
DMG 2 T KNX, DM 2 T KNX



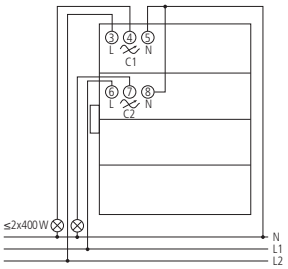
DMG 2 T KNX, DM 2 T KNX



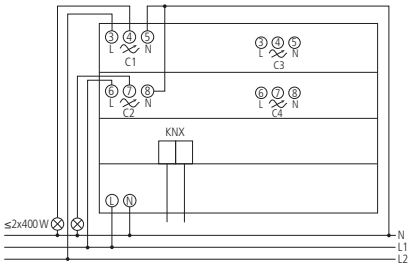
DMG 2 T KNX, DMB 1 T KNX



DME 2 T KNX



DME 2 T KNX



DM 4 T KNX



Description

Common functions
- 2-way 1–10 V control unit MIX
- Free combination of switches, dimming, blinds and heating control as well as binary inputs
- Switching and dimming of lighting circuits in combination with electronic ballasts (EBs and ballasts LED)
- 1–10 V inputs and one switch output (relay contact) per channel
- LED switching status display for each channel
- Manual switch with On/Off/Bus settings (also without bus voltage)
- With crossover switching to spare the relay contact

SMG 2 S KNX
- Base module MIX
- Can be upgraded to maximum of 6 channels

SME 2 S KNX
- Extension module MIX
- For upgrading to maximum of 6 channels

Product selection

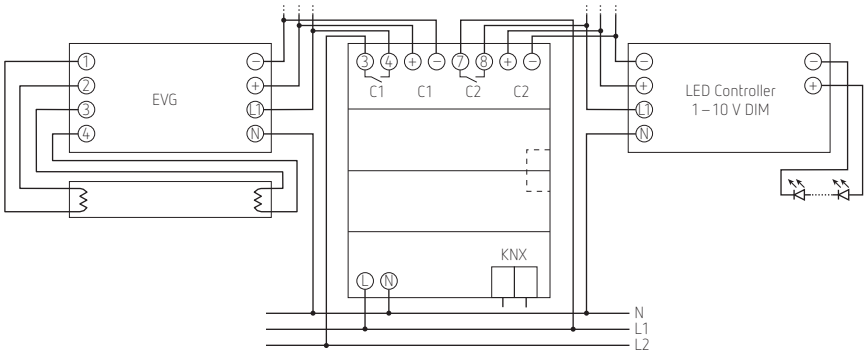
Type	Article number
SMG 2 S KNX	4910273
SME 2 S KNX	4910274

12

Technical data

	SMG 2 S KNX	SME 2 S KNX
Operating voltage KNX	Bus voltage, ≤ 10 mA	–
Operating voltage	230 V AC	
Frequency	50 Hz	
Stand-by consumption	1,6 W	
Width	4 modules	
Type of contact	NO contact, 16 A (cos φ = 1), 10 A (cos φ = 0,6)	
Incandescent / halogen lamp load	2500 W	
Ambient temperature	–5 °C … +45 °C	
Type of protection	IP 20	
Protection class	II according to EN 60 730-1	

Connection diagrams

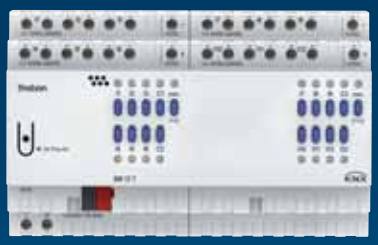




BMG 6 T KNX



BME 6 T KNX



BM 12 T KNX

Description

Common functions

- Binary input
- LED switching status display for each channel
- Manual operation on device (even without bus connection)
- Manual operation per channel for simulating the input states
- All inputs can be operated with different voltages and at different potentials
- Connectable cable length up to 100 m
- Free allocation of functions: switch/push button, dimming, blinds/roller blinds, counter, repeat telegram, sequences

BMG 6 T KNX

- 6-way binary input MIX2
- Base module MIX2
- Can be upgraded to maximum of 18 channels
- 6 floating universal and wide-range voltage inputs (10–240 V AC/DC or internally generated auxiliary voltage of approx. 12 V DC)
- 2 additional channels operable by buttons on the device, but without input
- Up to two extension modules MIX or MIX2 can be connected to one base module
- Device and KNX bus module can be swapped independently of each other
- Removable KNX bus module enables devices to be changed without reprogramming
- Manual set-up and use of actuator is possible without KNX bus module

BME 6 T KNX

- 6-way binary input MIX2
- Extension module MIX2
- For upgrading to maximum of 18 channels

BM 6 T KNX

- 6-way binary input
- 6 floating universal and wide-range voltage inputs (10–240 V AC/DC or internally generated auxiliary voltage of approx. 12 V DC)
- 2 additional channels operable by buttons on the device, but without input

BM 12 T KNX

- 12-way binary input
- 12 floating universal and wide-range voltage inputs (10–240 V AC/DC or internally generated auxiliary voltage of approx. 12 V DC)
- 4 additional channels operable by buttons on the device, but without input

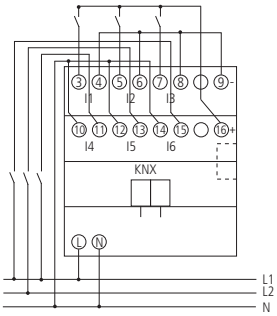
Product selection

Function	Type	Article number
MIX2 Base module	BMG 6 T KNX	4930230
MIX2 Extension module	BME 6 T KNX	4930235
FIIX1 module	BM 6 T KNX	4940230
FIIX2 module	BM 12 T KNX	4940235

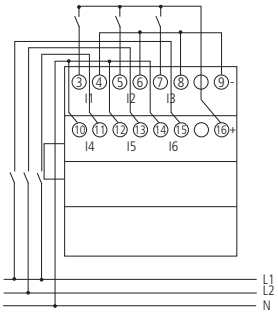
Technical data

	BMG 6 T KNX	BME 6 T KNX	BM 12 T KNX	BM 6 T KNX
Operating voltage KNX	Bus voltage, ≤ 4 mA	–	Bus voltage, ≤ 4 mA	
Operating voltage	110–240 V AC	–	110–240 V AC	
Frequency	50–60 Hz	–	50–60 Hz	
Stand-by consumption	0,3 W	–	0,5 W	0,3 W
Width	4 modules		8 modules	4 modules
Voltage inputs	10 V DC–240 V AC 2 mA			
Ambient temperature	–5 °C … +45 °C			
Type of protection	IP 20			
Protection class	II according to EN 60 730-1			

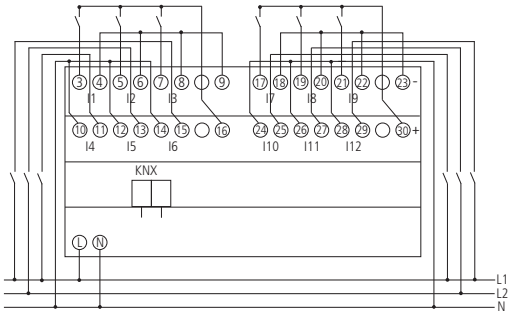
Connection diagrams



BMG 6 T KNX, BM 6 T KNX

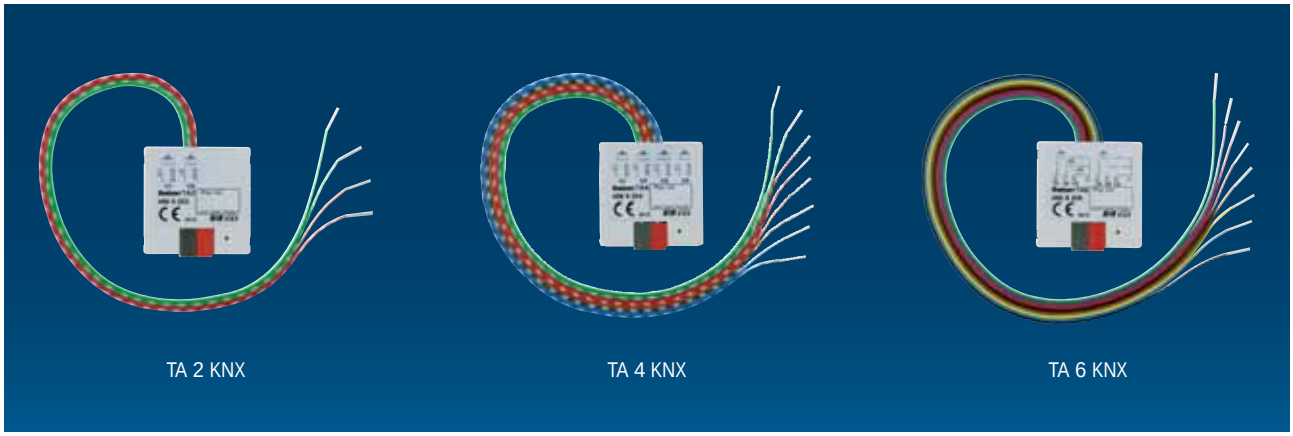


BME 6 T KNX



BM 12 T KNX

12



Description

Common functions

- Binary input/binary output sensor interfaces
- Can be installed in flush-mounted sockets with conventional sensors/switches
- Free allocation of functions: Switch/key, dimming, blinds, valuator
- Inputs can be reconfigured to outputs: binary input: potential-free contact/binary output: 1 mA (low current) (LED 1 mA types)
- Colour coding of wiring pairs
- Grooves on side of housing for switch/sensor clamps

TA 2 KNX

- 2-way key interface
- 4-pole cable connection

TA 4 KNX

- 4-way key interface
- 8-pole cable connection

TA 6 KNX

- 6-way key interface
- 8-pole cable connection

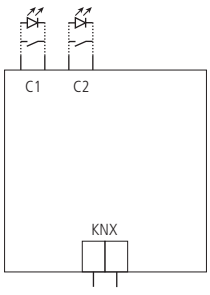
Product selection

Type	Article number
TA 2 KNX	4969202
TA 4 KNX	4969204
TA 6 KNX	4969206

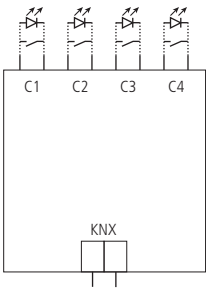
Technical data

	TA 2 KNX	TA 4 KNX	TA 6 KNX
Operating voltage KNX	Bus voltage, ≤10 mA		
Length connecting wires	25 cm		
Ouput configuration LED	Low current 1 mA (LED 1 mA types) without series resistor		
Contact voltage	3,3 V		
Contact current	0,5 mA		
Interface extension max.	5 m		
Ambient temperature	–5 °C ... +45 °C		
Type of protection	IP 20		
Protection class	III		

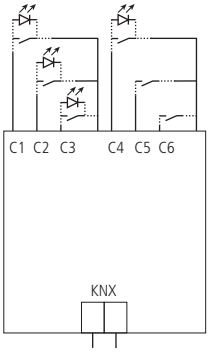
Connection diagrams



TA 2 KNX



TA 4 KNX



TA 6 KNX



VARIA 826 S KNX



VARIA 826 S KNX

reddot design award winner 2009

Description

Common functions

- Multi-functional display with room thermostat
- Glass front in white or black
- Freely configurable for displaying and controlling functions e.g. light settings, sun protection systems
- Backlit display and integrated time switch
- For control and regulation of heating, fan coils, air conditioning systems
- Up to 7 different display pages
- Automatic summer/winter time adjustment with power reserve
- Controls up to 8 rooms via own temperature profiles
- Weekly time switch with 8 channels with up to 3 different statuses, e.g. for light, shutters, fans etc.
- 3 heating programs
- Alternative continuous or on/off control
- Operation modes: comfort, stand-by, temperature reduction at night, frost protection
- Weather data from Theben weather stations can be displayed
- Free choice of programming via the ETS without plug-in
- Installation in flush-mounted socket

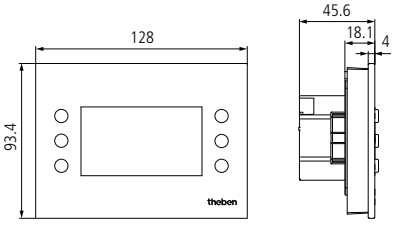
Product selection

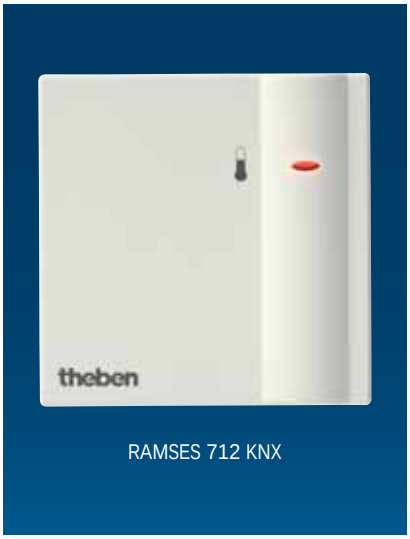
Colour	Type	Article number
Glass front in white	VARIA 826 S WH KNX	8269210
Glass front in black	VARIA 826 S BK KNX	8269211

Technical data

	VARIA 826 S WH KNX	VARIA 826 S BK KNX
Operating voltage KNX	Bus voltage, ≤ 15 mA, (< 25 mA without power supply)	
Operating voltage	230 V AC	
Frequency	50 Hz	
Stand-by consumption	0,4 W	
Power reserve	1,5 years	
Display	Display with 132 x 72 points (8 lines with various functions) e.g. title, switching, dimming, blinds/shutters, % value, HVAC, counter value, temperature, 2-byte value, 8/16 bit counter value etc.	
Ambient temperature	0 °C ... +45 °C	
Type of protection	IP 20	
Protection class	II according to EN 60 730-1	

Scale drawings





RAMSES 712 KNX

Description

- Individual room thermostat
- For controlling heating actuators or motorised actuators
- Can be used as a continuous or two point control (can also be combined)
- Temperature sensor can be connected to give remote temperature reading
- Objects for night operation (only with „old" operation mode selection) presence, window/frost.
- LED (red) for heating mode
- Inputs can be reconfigured to outputs for connecting LED (LED 1 mA types)
- 2 binary inputs for conventional switches/sensors (switch/sensor, dimmer, blinds, valuator, LED control)
- Can be installed in flush-mounted sockets (temperature sensor with electronic component can be removed from housing and installed in flush-mounted sockets with back-ventilated cover)
- With integrated bus coupling unit

Product selection

Type	Article number
RAMSES 712 KNX	7129200

Technical data

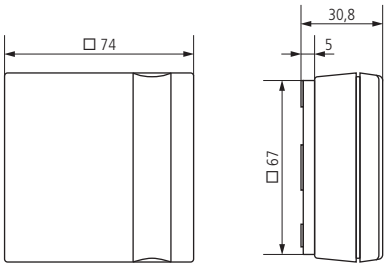
	RAMSES 712 KNX
Operating voltage KNX	Bus voltage, ≤ 10 mA
Ouput configuration LED	Low current 1 mA (LED 1 mA types)
Interface extension max.	5 m
Ambient temperature	−5 °C ... +45 °C
Measuring range temperature	−20 °C ... +60 °C
Type of protection	IP 20
Protection class	II according to EN 60 730-1

Accessories



Temperature sensor
↳ Art.No.: 9070321
Details page 287

Scale drawings





RAMSES 713 S KNX

Description

- Individual room thermostat
- For controlling heating actuators or motorised actuators
- Can be used as a continuous or two point control (can also be combined).
- Continuous PI control can be configured for 2 stage heating (basic and additional stage, e. g. underfloor heating and radiators) or for heating and cooling (radiators and cooling surfaces)
- Two rotary controls are included in delivery: a numerical scale (mounted) and a relative scale (enclosed)
- Rotary control can be limited mechanically or via parameters
- Manual override button for presence or operation modes: comfort, stand-by, temperature reduction at night, frost protection
- 3 binary inputs for conventional switches/sensors (switching, dimming, blinds), also for externeal temperature sensor, window contact or presence signal
- Temperature sensor can be connected to give remote temperature reading
- LED (red) for heating mode, (blue) for cooling mode
- With integrated bus coupling unit

Product selection

Type	Article number
RAMSES 713 S KNX	7139201

Technical data

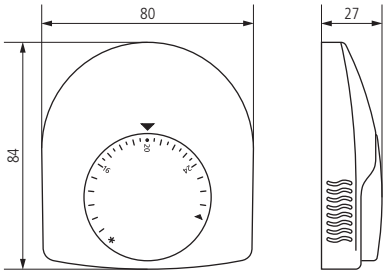
	RAMSES 713 S KNX
Operating voltage KNX	Bus voltage, ≤ 10 mA
Ambient temperature	0 °C ... +50 °C
Measuring range temperature	0 °C ... +40 °C
Setting range temperature	+10 °C ... +28 °C
Type of protection	IP 20
Protection class	II according to EN 60 730-1

Accessories



External temperature sensor 1
↳ Art.No.: 9070191
Details page 286

Scale drawings

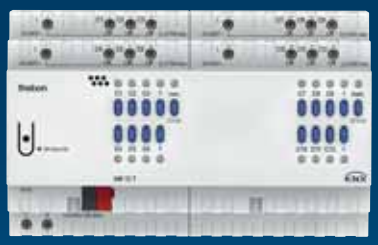




HMG 6 T KNX



HME 6 T KNX



HM 12 T KNX

Description

Common functions

- Heating actuator
- Short-circuit-proof and overcharge protected
- Continuous or switching actuating value selectable
- Valve protection function can be deactivated
- With the modes: comfort, standby, night as well as frost/heating protection
- Changeover to summer mode possible
- LED switching status display for each channel
- Manual operation on device (even without bus connection)

HMG 6 T KNX

- 6-way heating actuator MIX2
- With 6 temperature controllers (P/PI) for heating and cooling
- Base module MIX2
- Can be upgraded to maximum of 18 channels
- For controlling 6 thermal actuators 24 V–240 V AC in 2 groups with 3 outputs and 450 mA each
- Up to two extension modules MIX or MIX2 can be connected to one base module
- Device and KNX bus module can be swapped independently of each other
- Removable KNX bus module enables devices to be changed without reprogramming
- Manual set-up and use of actuator is possible without KNX bus module

HME 6 T KNX

- 6-way heating actuator MIX2
- With 6 temperature controllers (P/PI) for heating and cooling
- Extension module MIX2
- For upgrading to maximum of 18 channels

HM 6 T KNX

- 6-way heating actuator
- With 6 temperature controllers (P/PI) for heating and cooling
- For controlling 6 thermal actuators 24 V–240 V AC in 2 groups with 3 outputs and 450 mA each

HM 12 T KNX

- 12-way heating actuator
- With 12 temperature controllers (P/PI) for heating and cooling
- For controlling 12 thermal actuators 24 V–240 V AC in 4 groups with 3 outputs and 450 mA each

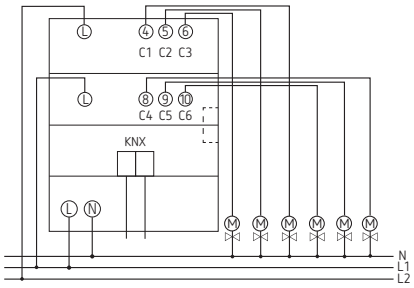
Product selection

Function	Type	Article number
MIX2 Base module	HMG 6 T KNX	4930240
MIX2 Extension module	HME 6 T KNX	4930245
FIIX1 module	HM 6 T KNX	4940240
FIIX2 module	HM 12 T KNX	4940245

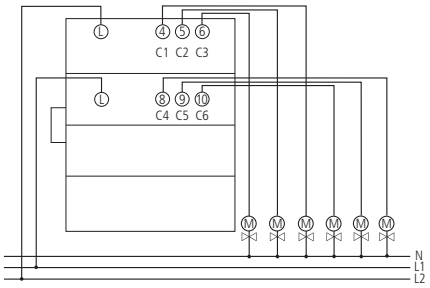
Technical data

	HMG 6 T KNX	HME 6 T KNX	HM 12 T KNX	HM 6 T KNX
Operating voltage KNX	Bus voltage, ≤ 4 mA	–	Bus voltage, ≤ 12 mA	Bus voltage, ≤ 4 mA
Operating voltage	110 – 240 V AC	–	110 – 240 V AC	
Frequency	50 – 60 Hz	–	50 – 60 Hz	
Stand-by consumption	0,3 W	0,2 W	0,5 W	0,3 W
Width	4 modules		8 modules	4 modules
Switching output	Not potential-free			
Output	Triac, 0,45 A			
Ambient temperature	– 5 °C ... +45 °C			
Type of protection	IP 20			
Protection class	II according to EN 60 669			

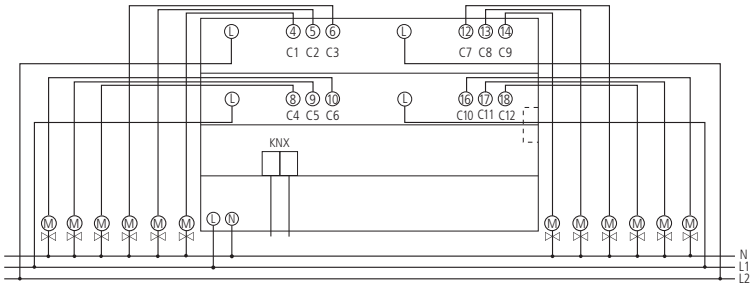
Connection diagrams



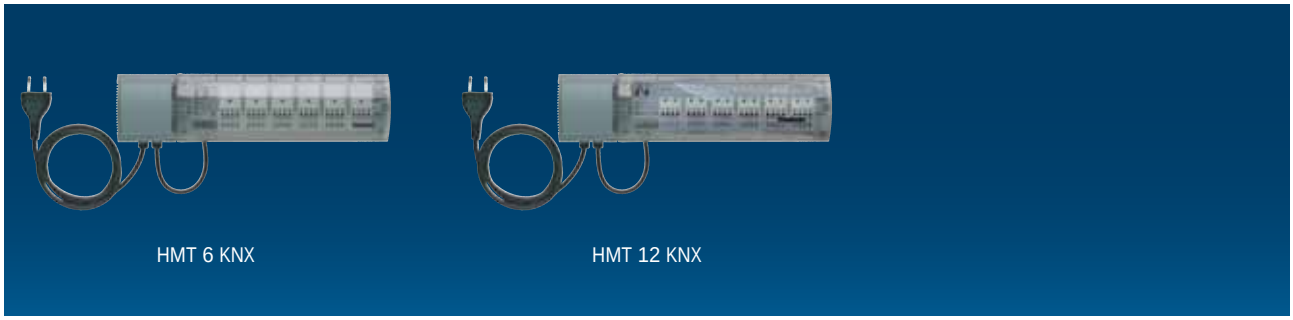
HMG 6 T KNX, HM 6 T KNX



HME 6 T KNX



HM 12 TKNX



Description

Common functions

- Heating actuator
- Can be installed directly on a wall or a rail in the heating circuit distributor
- Mains plug on transformer for easy installation
- Screwless terminal technology
- Integrated power supply for a maximum of 13 thermal actuators
- Silent semiconductor switch (triac)
- For integrating boiler control
- Continuous or switching actuating value selectable

HMT 6 KNX

- 6-way

HMT 12 KNX

- 12-way

Product selection

Type	Article number
HMT 6 KNX	4900273
HMT 12 KNX	4900274

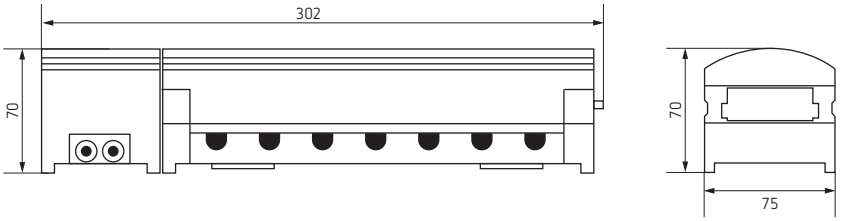
Technical data

	HMT 6 KNX	HMT 12 KNX
Operating voltage KNX	Bus voltage, ≤ 10 mA	
Operating voltage	230 V AC	
Stand-by consumption	4 W	
Frequency	50 – 60 Hz	
Number of channels	6	12
Output	Triac	
Fuse	T 2 A	
Ambient temperature	– 5 °C ... +50 °C	
Type of protection	IP 20	
Protection class	II according to EN 60 730-1	

Accessories

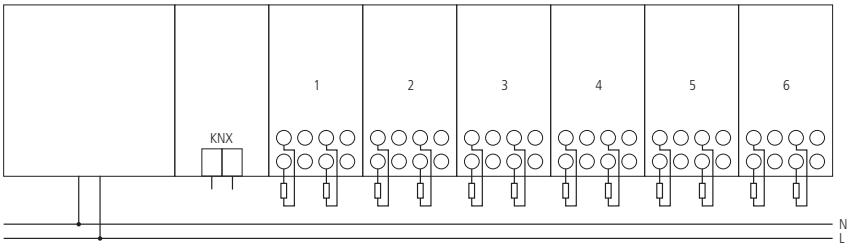
Actuator ALPHA 5 24 V
Details page 288

Scale drawings



HMT 6 KNX, HMT 12 KNX

Connection diagrams



HMT 6 KNX



reddot design award winner 2003

CHEOPS control KNX



CHEOPS drive KNX

Description

Common functions

- Motorised actuator for heater valve or for controlling the heating valves
- Display of valve stroke
- Automatic valve stroke recognition
- 2 inputs for window contact, presence detector, remote sensor (remote sensor only for CHEOPS control and only 9070191)
- Simple installation by clicking onto valve adapter
- Can be used in heating circuit distributor
- Integrated bus coupling unit
- With summer mode and valve protection
- 2 different valve adapters included (VA 10, VA 78)

CHEOPS control KNX

- Independent room thermostat and integrated temperature sensor
- Manual operation possible via 2 keys on the device
- Display via LEDs (red/blue for hotter/colder)
- Configurable as: Heating control (continuous control),two stage heating, heating and cooling

CHEOPS drive KNX

- Without integrated control
- Display via LEDs (red)

Product selection

Type	Article number
CHEOPS control KNX	7329201
CHEOPS drive KNX	7319200

Technical data

	CHEOPS control KNX	CHEOPS drive KNX
Operating voltage KNX	Bus voltage, ≤ 10 mA	
Max. valve stroke	7,5 mm	
Controlling torque details	120 N	
Ambient temperature	0 °C ... +50 °C	
Dimensions	50 mm, 82 mm, 65 mm	
Protection class	III according to EN 60730-2-14	
Type of protection	IP 20	IP 21

12

Accessories

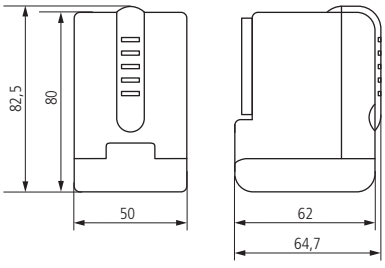


External temperature sensor 1
for CHEOPS control KNX
↳ Art.No.: 9070191
Details page 286



Valve adapter VA 80
↳ Art.No.: 9070437
Details page 288

Scale drawings





AMUN 716 KNX

Description

- CO_2 airquality sensor
- Measures CO_2 level, relative humidity and temperature
- Three independent, configurable thresholds for the CO_2 level and relative humidity
- A threshold for the temperature
- Actions can be carried out if thresholds are exceeded or not reached (send, priority,
- switching, value)
- Display of achieved threshold of CO_2 level and relative humidity through multi-coloured LEDs
- CO_2 setting range of 500-2250 ppm (thresholds)
- Relative humidity of 1 % to 100 %
- „Physical value" object of 0 – 9999 ppm
- Power supply via KNX bus voltage, 230 V mains supply not required

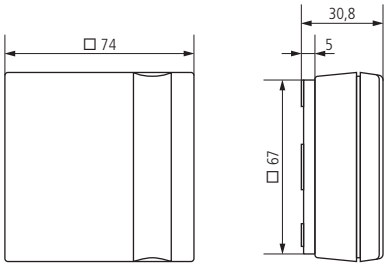
Product selection

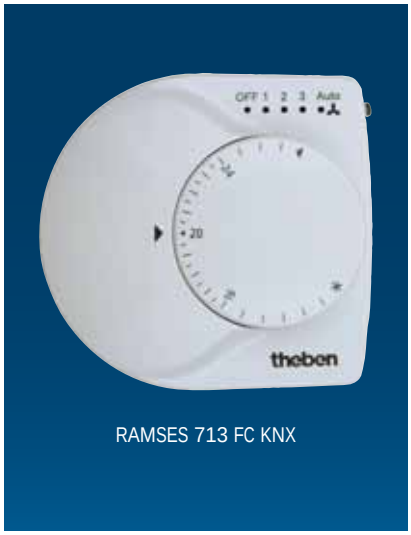
Type	Article number
AMUN 716 KNX	7169200

Technical data

	AMUN 716 KNX
Operating voltage KNX	Bus voltage, ≤ 10 mA
Max. valve stroke	7,5 mm
Controlling torque details	120 N
Ambient temperature	0 °C ... +50 °C
Dimensions	50 mm, 82 mm, 65 mm
Protection class	III according to EN 60730-2-14
Type of protection	IP 20

Scale drawings





RAMSES 713 FC KNX

Description

- Individual room thermostat fan coil
- For control of fan coil
- Continuous PI controller for heating and cooling
- Two rotary controls are included in delivery: an absolute scale (mounted) and 1 relative scale (enclosed)
- Rotary control can be limited mechanically or via parameters.
- Manual button for OFF, Auto, fan stages 1, 2, 3 operation modes
- 3 binary inputs for conventional switches/ sensors (switching, dimming, blinds), also for externeal temperature sensor, window contact or presence signal
- LED (red) for heating mode, (blue) for cooling mode
- With integrated bus coupling unit

Product selection

Type	Article number
RAMSES 713 FC KNX	7139202

Technical data

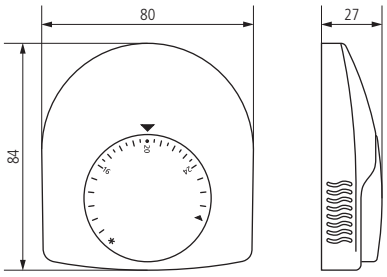
	RAMSES 713 FC KNX
Operating voltage KNX	Bus voltage, ≤ 10 mA
Ambient temperature	0 °C ... +50 °C
Measuring range temperature	0 °C ... +40 °C
Setting range temperature	+10 °C ... +28 °C
Type of protection	IP 20
Protection class	II according to EN 60 730-1

Accessories



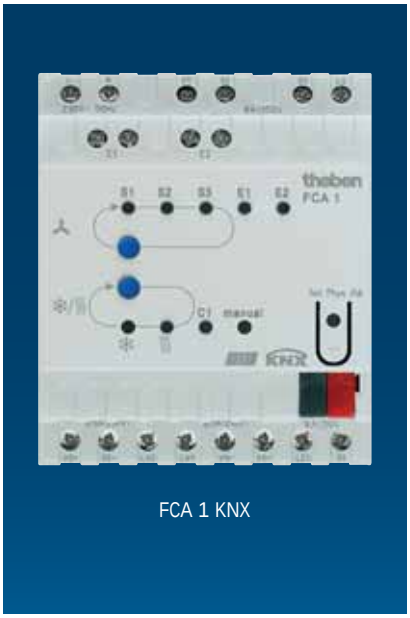
External temperature sensor 1
↳ Art.No.: 9070191
Details page 286

Scale drawings



RAMSES 713 FC KNX

12



FCA 1 KNX

Description

- Fan coil actuator
- For controlling fan coils
- For 2 and 4 pipe systems
- For up to three fan stages
- For 2-way and 3-way valves
- Additional relay for electrical heater or cooler bank
- Potential-free input for window contacts or temperature sensor
- Potential-free, condensation monitoring
- Display of operation status via 9 LEDs
- Manual operation on device (fan satges, switching between heating and cooling)
- Adjustment of setpoint value for cooling in relation to external temperature
- Potential-free switching contact for either cooler or heater bank
- With emergency program

Product selection

Type	Article number
FCA 1 KNX	4920200

Technical data

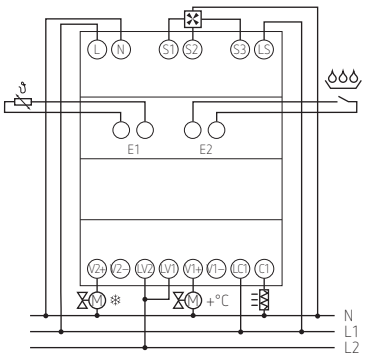
	FCA 1 KNX
Operating voltage KNX	Bus voltage, ≤ 10 mA
Operating voltage	220–230 V AC
Frequency	50–60 Hz
Stand-by consumption	1,9 W
Width	4 modules
Type of contact	Triac
Switching capacity additional relay	16 A
Switching capacity blower relay	8 A
Ambient temperature	–5 °C ... +45 °C
Type of protection	IP 20
Protection class	II according to EN 60 730-1

Accessories



Temperature sensor
↳ Art.No.: 9070321
Details page 287

Connection diagrams



FCA 1 KNX



PresenceLight 360B-KNX

Description

- Presence detector (PIR)
- Automatic control of lighting depending on presence and brightness
- Square detection area allows accurate and simple planning
- Integrated bus coupling
- IP 54 for versatile use
- Outputs light for controlling one or two lighting groups
- Mixed light measurement, suitable for fluorescent lamps (FL / PL / ESL), halogen / incandescent lamps and LEDs
- Switching or constant light control with stand-by function
- Adjustable sensitivity
- Choice of fully or semi automatic operation: In „Semi-automatic" mode the light must be switched on manually and switches off automatically
- Short presence; Reduced switch-off delay time in case of a short presence
- Self-learning time delay
- Channel presence with switch-off delay and switch-on delay time and send values
- Function „monitoring" with reduced sensitivity only to detect walking persons
- Channel brightness (Lux)
- Set brightness level via bus object
- Scene functionality (8-bit scenes)
- Selected parameters can be configured remotely using the SendoPro remote control. Parameter settings are made via ETS
- Optional user remote control
- Ready for use by ex-factory set items
- Test operation to check detection area and installation
- Parallel switching of several presence detectors (master-slave or master-master) possible
- Ceiling mounting in flush-mounted box
- Possibility of surface mounting by using a surface frame

Product selection

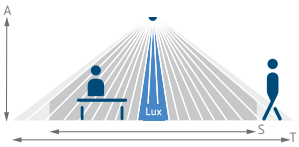
Installation type	Colour	Type	Article number
Ceiling installation	Pure white (similar to RAL 9010)	PresenceLight 360B-KNX WH	2009000
	Black (similar to RAL 9005)	PresenceLight 360B-KNX BK	2009812
	Silver (similar to RAL 9006)	PresenceLight 360B-KNX SR	2009813

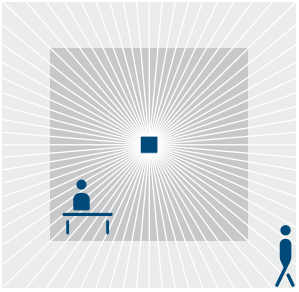
Technical data

	PresenceLight 360B-KNX
Operating voltage KNX	Bus voltage, approx. 13 mA (17 mA LED on)
Installation height	2 – 3,5 m
Setting range brightness	approx. 5 – 2000 lx / measuring off
Light switch-off delay	30 s – 60 min
Stand-by time light	30 s – 60 min, on, inactive
Presence switch-off delay	10 s – 120 min
Switch-on delay presence	10 s – 30 min / inactive
Ambient temperature	– 10 °C ... +50 °C
Type of protection	IP 54 (when fitted)

Detection range (Square)

Mounting height (A)	Walking (T)	Sitting (S)
2 m	20 m² | 4,5 m x 4,5 m ± 0,5 m	9 m² | 3 m x 3 m
2,5 m	36 m² | 6 m x 6 m ± 0,5 m	16 m² | 4 m x 4 m
3 m	49 m² | 7 m x 7 m ± 1 m	20 m² | 4,5 m x 4,5 m
3,5 m	64 m² | 8 m x 8 m ± 1 m	–





Accessories



Surface frame PresenceLight
↳ Art.No.: 9070513
Details page 280



SendoPro 868-A
↳ Art.No.: 9070675
Details page 283



QuickSafe
↳ Art.No.: 9070531
Details page 282

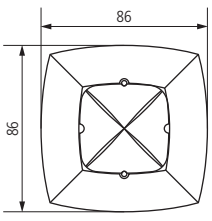


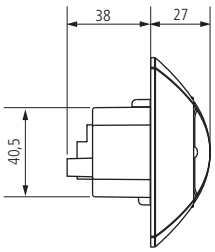
theSenda P
↳ Art.No.: 9070910
Details page 285

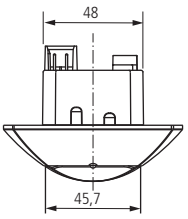


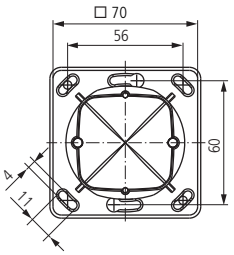
theSenda S
↳ Art.No.: 9070911
Details page 285

Scale drawings











Description

Common functions

- Presence detector (PIR)
- Mixed light measurement
- Two outputs light for controlling two lighting groups
- Switching or constant light control
- Choice of fully or semi automatic operation
- Presence output for HVAC control with switch-on delay and switch-off delay
- Room monitoring with selective movement detection
- Integrated bus coupling
- SendoPro 868-A service remote control (optional)
- Clic user remote control (optional)
- In the „switching" operation mode, lighting switches on with darkness and presence and off with sufficient light or when nobody is present. In the „constant light control" operation mode the sensor controls the artificial light daylight-dependent on a constant lighting level
- The self-learning switch-off delay time adjusts to occupants' behaviour
- Fully or semi-automatic: In „Fully automatic" mode, the lighting switches on and off automatically according to presence and light In „Semi-automatic" mode, it must be switched on manually and it switches off automatically
- The monitoring output works with reduced sensitivity and indicates the presence of persons with a high level of accuracy
- The brightness output makes the light information available for visualisation purposes
- Master or slave operating mode is selected via configuration
- Test operation mode checks the detection area and configuration
- A maximum of 10 detectors can be switched at the same time

compact passage KNX

- Square detection area for corridors

compact passimo KNX

- Rectangular detection area for storage areas with clear demarcation vertically below the presence detector

Product selection

Installation type	Colour	Type	Article number
Ceiling installation	Pure white (similar to RAL 9010)	compact passage KNX	2019290
	Black (similar to RAL 9005)	compact passage KNX BK	2019803
	Silver (similar to RAL 9006)	compact passage KNX SR	2019804
	Pure white (similar to RAL 9010)	compact passimo KNX WH	2019280
	Black (similar to RAL 9005)	compact passimo KNX BK	2019809
	Silver (similar to RAL 9006)	compact passimo KNX SR	2019810

12

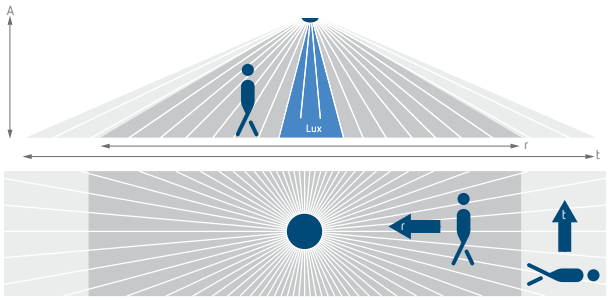
Technical data

	compact passage KNX / compact passimo KNX
Operating voltage KNX	Bus voltage, approx. 8 mA (9,5 mA LED on)
Installation height	2 – 6 m
Setting range brightness	approx. 10 – 1500 lx / measuring off
Light switch-off delay	30 s – 20 min
Stand-by time	0 s – 60 min / on
Presence switch-off delay	30 s-120 min
Switch-on delay presence	0 s – 30 min
Ambient temperature	0 °C ... +50 °C
Type of protection	IP 40 (when fitted)

Additional technical data at: www.theben.de / product / Articlenumber

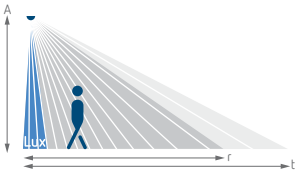
Detection range compact passage KNX (Rectangular)

Mounting height (A)	Diagonally (t)	Head on to (r)
2 m	56 m² | 16 m x 3.5 m ± 1 m	56 m² | 16 m x 3.5 m ± 1 m
2.5 m	88 m² | 22 m x 4 m ± 1 m	72 m² | 18 m x 4 m ± 1 m
3 m	135 m² | 30 m x 4.5 m ± 1 m	90 m² | 20 m x 4.5 m ± 1 m
3.5 m	150 m² | 30 m x 5 m ± 1 m	100 m² | 20 m x 5 m ± 1 m
4 m	150 m² | 30 m x 5 m ± 2 m	100 m² | 20 m x 5 m ± 2 m
4.5 m	150 m² | 30 m x 5 m ± 2 m	100 m² | 20 m x 5 m ± 2 m
5 m	150 m² | 30 m x 5 m ± 2.5 m	100 m² | 20 m x 5 m ± 2.5 m
6 m	150 m² | 30 m x 5 m ± 2.5 m	100 m² | 20 m x 5 m ± 2.5 m



Detection range compact passimo KNX (Rectangular)

Mounting height (A)	Diagonally (t)	Head on to (r)
2 m	28 m² | 8 m x 3.5 m ± 1.5 m	28 m² | 8 m x 3.5 m ± 1 m
2.5 m	44 m² | 11 m x 4 m ± 1.5 m	36 m² | 9 m x 4 m ± 1 m
3 m	68 m² | 15 m x 4.5 m ± 1.5 m	45 m² | 10 m x 4.5 m ± 1 m
3.5 m	75 m² | 15 m x 5 m ± 1.5 m	50 m² | 10 m x 5 m ± 1 m
4 m	75 m² | 15 m x 5 m ± 2 m	50 m² | 10 m x 5 m ± 2 m
4.5 m	75 m² | 15 m x 5 m ± 2 m	50 m² | 10 m x 5 m ± 2 m
5 m	75 m² | 15 m x 5 m ± 2.5 m	50 m² | 10 m x 5 m ± 2.5 m
6 m	75 m² | 15 m x 5 m ± 2.5 m	50 m² | 10 m x 5 m ± 2.5 m





Accessories



Surface frame compact
↳ Art.No.: 9070514
Details page 280



SendoPro 868-A
↳ Art.No.: 9070675
Details page 283

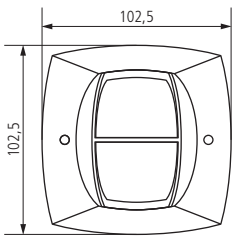


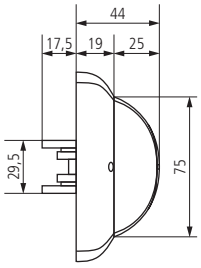
Ceiling installation box 73A
↳ Art.No.: 9070917
Details page 281

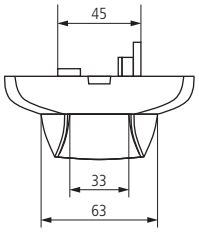
clic
Details page 283

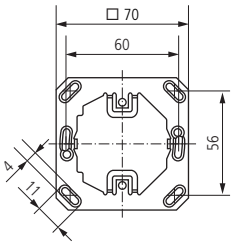
QuickSafe
Details page 282

Scale drawings










theRonda P360 KNX UP WH

Description

- KNX Passive infrared presence detector for ceiling mounting
- Round detection area 360°, up to Ø 24 m (452 m²)
- 2 channel light and 2 channel presence
- 2 channel light C1, C2 with 1 light measurement
- 2 presence channels can be parametrized individually
- Adaptable 1 channel light measurement
- Mixed light measurement suitable for LEDs, fluorescent lamps (FL/PL/ESL) and halogen/incandescent lamps
- Can be used as fully or semi-automatic, switchable
- Switch or constant light control mode with stand-by function
- Dimmable lighting in switch mode with stand-by function
- Brightness switching value or set point value can be set in lux using parameters, on the device itself or via remote control
- Teaching in of the brightness switching value or the set point value
- Room correction factor setting for brightness measurement calibration
- Light time delay can be set using parameters, on the device itself or via remote control
- Switch on delay and time delay for presence can be set
- Detection sensitivity can be set
- Reduced time delay in the event of a shorter stay in the room (short presence)
- Scenario functions
- Test mode for checking function and detection range
- Sensitivity adjustable
- Detection area can be limited using cover clip
- Manual override using telegram or remote control
- Parallel switching of several detectors in Master/Slave or Master/Master possible
- Ceiling installation in flush-mounted socket
- Ceiling installation also possible with surface-mounted frame
- User remote control and management-remote control (optional)

Product selection

Installation type	Colour	Type	Article number
Ceiling installation	White	theRonda P360 KNX UP WH	2089000
	Grey	theRonda P360 KNX UP GR	2089001
	Additional colours available upon request		

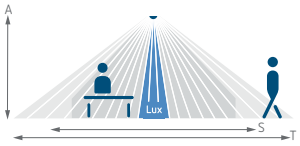
Technical data

	theRonda P360 KNX UP
Operating voltage KNX	Bus voltage, approx. 8 mA (9 mA LED on)
Installation height	2 – 10 m
Setting range brightness	10 – 3000 lx/measuring off
Light switch-off delay	30 s – 60 min
Stand-by dimming value	1 – 25 % of the lamp output
Stand-by time	30 s – 60 min/inactive/permanently on
Presence switch-off delay	10 s – 120 min
Switch-on delay presence	10 s – 30 min/inactive
Ambient temperature	–15 °C ... +50 °C
Type of protection	IP 54 (when fitted)

Detection range (Round)

Mounting height (A)	Sitting (S)	Walking diagonally (T)	Walking head on to
2 m	20 m² | 5 m	380 m² | 22 m	28 m² | 6 m
2,5 m	28 m² | 6 m	415 m² | 23 m	38 m² | 7 m
3 m	38 m² | 7 m	452 m² | 24 m	50 m² | 8 m
3,5 m	38 m² | 7 m	452 m² | 24 m	50 m² | 8 m
6 m	–	452 m² | 24 m	50 m² | 8 m
10 m	–	491 m² | 25 m	50 m² | 8 m

With a mounting height of more than 3.5 m walking motions are necessary and the detection areas of several detectors should overlap in the marginal zone. All figures are up to values. The detection range decreases with increasing temperatures.



Accessories



Surface frame 110A WH
↳ Art.No.: 9070912
Details page 280



theSenda P
↳ Art.No.: 9070910
Details page 285



theSenda S
↳ Art.No.: 9070911
Details page 285

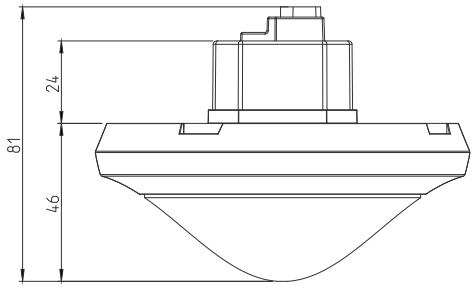
SendoPro 868-A
Details page 283

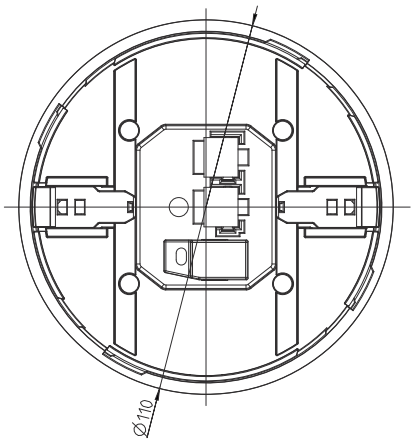
Masking clip
Details page 281

QuickSafe
Details page 282

Ceiling installation box 73A
Details page 281

Scale drawings







Description

Common functions

- KNX Passive infrared presence detector for ceiling mounting
- Square detection range of 360° for safe and easy planning
- Mixed light measurement suitable for LEDs, fluorescent lamps (FL / PL / ESL) and halogen / incandescent lamps
- Can be used as fully or semi-automatic, switchable
- Switch or constant light control mode with stand-by function
- Dimmable lighting in switch mode with stand-by function
- Brightness switching value or set point value can be set in lux using parameters, on the device itself or via remote control
- Teaching in of the brightness switching value or the set point value
- Room correction factor setting for brightness measurement calibration
- Light time delay can be set using parameters, on the device itself or via remote control
- Switch on delay and time delay for presence can be set
- Detection sensitivity can be set
- Self-learning time delay
- Reduced time delay in the event of a shorter stay in the room (short presence)
- Scenario functions
- Extremely easy setting of energy saving characteristics with the new „eco plus" function
- Test mode for checking function and detection range
- Parallel switching of several detectors in Master / Slave or Master / Master possible
- User remote control and management-remote control (optional)
- Room monitoring

thePrema P360 KNX UP

- 3 channel light and 2 channel presence
- 2 channel light C1, C2 with 2 light measurements and additional lighting channel C3 without brightness factor
- 2 presence channels can be set individually
- Adaptable 3 channel light measurement

thePrema S360 KNX UP

- 2 channel light and 2 channel presence
- 2 channel light C1, C2 with 1 light measurement
- 2 presence channels can be set individually with parallel offset
- Adaptable 1 channel light measurement

Product selection

Channels	Colour	Type	Article number
3x light / 2x presence	White	thePrema P360 KNX UP WH	2079000
	Grey	thePrema P360 KNX UP GR	2079001
2x light / 2x presence	White	thePrema S360 KNX UP WH	2079500
	Grey	thePrema S360 KNX UP GR	2079501
	Additional colours available upon request		

Technical data

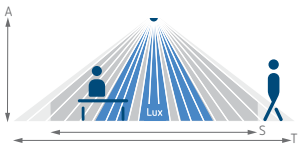
	thePrema P360 KNX UP	thePrema S360 KNX UP
Operating voltage KNX	Bus voltage, approx. 9 mA (13 mA LED on)	Bus voltage, approx. 8 mA (12 mA LED on)
Installation height	2 – 10 m	2 – 3,5 m
Setting range brightness	approx. 5 – 3000 lx / measuring off	
Light switch-off delay	30 s – 60 min	
Stand-by dimming value	1 – 25 % of the lamp output	

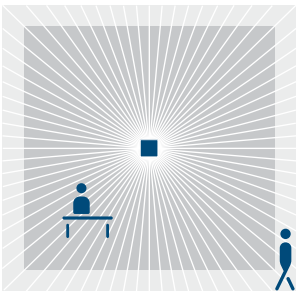
	thePrema P360 KNX UP	thePrema S360 KNX UP
Stand-by time	30 s – 60 min / inactive / permanently on	
Presence switch-off delay	10 s – 120 min	
Switch-on delay presence	10 s – 30 min / inactive	
Ambient temperature	0 °C ... +50 °C	
Type of protection	IP 40 (when fitted)	

Detection range thePrema P360 KNX (Square)

Mounting height (A)	Walking (T)	Sitting (S)
2 m	36 m² | 6 m x 6 m ± 0,5 m	20 m² | 4,5 m x 4,5 m
2,5 m	64 m² | 8 m x 8 m ± 0,5 m	36 m² | 6 m x 6 m
3 m	81 m² | 9 m x 9 m ± 1 m	49 m² | 7 m x 7 m
3,5 m	100 m² | 10 m x 10 m ± 1 m	64 m² | 8 m x 8 m
6 m	144 m² | 12 m x 12 m ± 1,5 m	–
10 m	400 m² | 20 m x 20 m ± 2 m	–

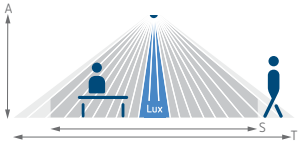
With a mounting height of more than 3.5 m walking motions are necessary and the detection areas of several detectors should overlap in the marginal zone. All figures are up to values. The detection range decreases with increasing temperatures.

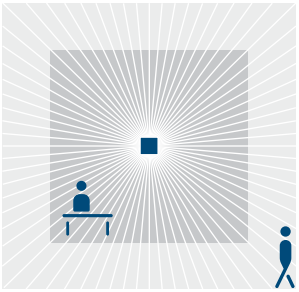




Detection range thePrema S360 KNX (Square)

Mounting height (A)	Walking (T)	Sitting (S)
2 m	20 m² | 4 m x 4 m ± 0,5 m	9 m² | 3 m x 3 m
2,5 m	36 m² | 6 m x 6 m ± 0,5 m	16 m² | 4 m x 4 m
3 m	49 m² | 7 m x 8 m ± 1 m	25 m² | 5 m x 5 m
3,5 m	64 m² | 8 m x 8 m ± 1 m	–





Accessories



Surface frame 110B WH
↳ Art.No.: 9070918
Details page 280



theSenda P
↳ Art.No.: 9070910
Details page 285



theSenda S
↳ Art.No.: 9070911
Details page 285

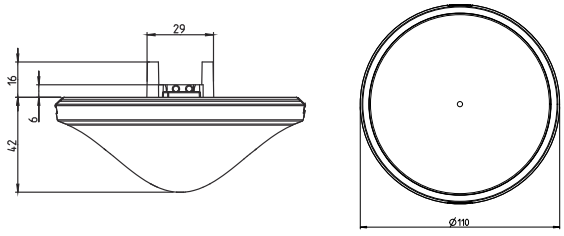
Surface frame 110A WH
Details page 280

SendoPro 868-A
Details page 283

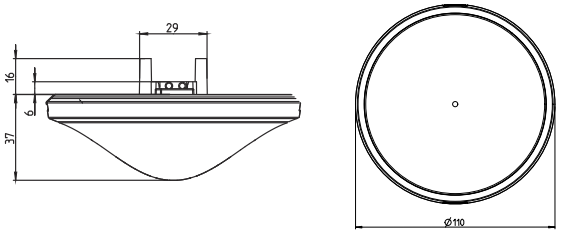
Ceiling installation box 73A
Details page 281

QuickSafe
Details page 282

Scale drawings



thePrema P360 KNX



thePrema S360 KNX

* According to warranty terms and conditions, see www.theben.de/en/guarantee



Description

- Passive infrared presence detector for ceiling installation
- Flat design with interchangeable cover frame in different colors
- Square detection area 360° (up to 64 m²) for reliable and easy planning
- Automatic presence- and brightness-dependent control for lighting and HVAC
- Two differently sized detection zones for greater flexibility. Adjustable via parameters or remote control.
- Manual alignment of the detection area (swivel mechanism)
- Mixed light measurement suitable for fluorescent lamps (FL / PL / ESL), halogen / incandescent lamps and LEDs
- 3 directed light measurements
- 2 light channels C1, C2 with 2 light measurements and additional lighting channel C3 without brightness factor
- Switched or constant light control with 2 independent control systems and standby function (orientation light)
- Switching mode with dimmable lighting
- Fully or semi-automatic
- Brightness switching value or set point value can be set in lux by using parameters, the object or via remote control
- Teach-in of the brightness switching value or the set point value
- Light time delay configurable
- Self-learning time delay can be set using parameters, object or via remote control
- Reduction of time delay when present briefly (short-term presence)
- Manual override by telegram or remote control
- 2 presence channels C4, C5, individually configurable
- Switch-on delay and time delay configurable
- Room monitoring with selective movement detection
- Setting the room correction factor for brightness measurement comparison
- Configurable sensitivity
- Extremely simple setting of the energy-saving ratio with the new «eco plus» function
- Test mode for checking function and detection area
- Scenarios
- Parallel switching of multiple presence detectors (Master / Slave or Master / Master)
- Installation in false ceilings with springs
- Surface mounting on ceilings possible with the AP-frame (optional)
- User remote control «theSenda S» (optional)
- Management remote control «SendoPro» (optional)
- Installation remote control «theSenda P» (optional)

Product selection

Installation type	Colour	Type	Article number
Ceiling installation	Pure white (similar to RAL 9010)	PlanoSpot 360 KNX DE WH	2039100
	Black (similar to RAL 9005)	PlanoSpot 360 KNX DE BK	2039101
	Silver (similar to RAL 9006)	PlanoSpot 360 KNX DE SR	2039101

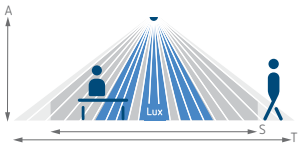
Technical data

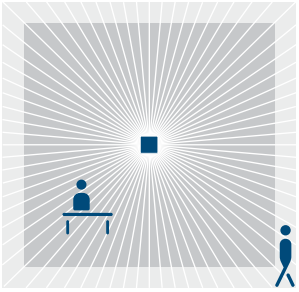
	PlanoSpot 360 KNX DE
Operating voltage KNX	Bus voltage, approx. 8 mA (9 mA LED on)
Installation height	2 – 3,5 m
Setting range brightness	approx. 10 – 3000 lx / measuring off
Light switch-off delay	30 s – 60 min
Stand-by dimming value	1 – 25 % of the lamp output
Stand-by time	30 s – 60 min / on / inactive
Presence switch-off delay	10 s – 120 min
Switch-on delay presence	10 s – 30 min / inactive
Ambient temperature	0 °C ... +50 °C
Type of protection	IP 40 (when fitted)

Detection range (Square)

Detection zone standard		
Mounting height (A)	Sitting (S)	Walking (T)
2 m	9 m² | 3 m x 3 m	20 m² | 4,5 m x 4,5 m ± 0,5 m
2,5 m	16 m² | 4 m x 4 m	36 m² | 6 m x 6 m ± 0,5 m
3 m	20 m² | 4,5 m x 4,5 m	49 m² | 7 m x 7 m ± 1 m
3,5 m	–	64 m² | 8 m x 8 m ± 1 m

Detection zone reduced		
Mounting height (A)	Sitting (S)	Walking (T)
2 m	4 m² | 2 m x 2 m	4,4 m² | 2,1 m x 2,1 m ± 0,5 m
2,5 m	6,3 m² | 2,5 m x 2,5 m	9 m² | 3 m x 3 m ± 0,5 m
3 m	9 m² | 3 m x 3 m	14,4 m² | 3,8 m x 3,8 m ± 1 m
3,5 m	–	22,1 m² | 4,7 m x 4,7 m ± 1 m





Accessories



SendoPro 868-A
↳ Art.No.: 9070675
Details page 283



theSenda P
↳ Art.No.: 9070910
Details page 285

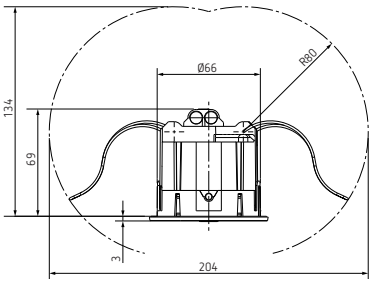


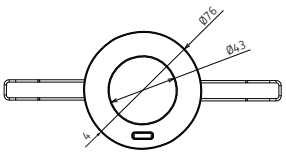
theSenda S
↳ Art.No.: 9070911
Details page 285



Surface frame 75A WH
↳ Art.No.: 9070949
Details page 281

Scale drawings







Description

- Presence detector (PIR)
- Automatic control of lighting depending on presence and brightness
- Flush design
- Square detection area allows accurate and simple planning
- Integrated bus coupling
- Outputs light for controlling one or two lighting groups
- Mixed light measurement, suitable for fluorescent lamps (FL/PL/ESL), halogen/incandescent lamps and LEDs
- Switching or constant light control with stand-by function
- Adjustable sensitivity
- Choice of fully or semi automatic operation: In „Semi-automatic" mode the light must be switched on manually and switches off automatically
- The self-learning switch-off delay time adjusts to occupants' behavior
- Short presence; Reduced switch-off delay time in case of a short presence
- Channel presence with switch-off delay and switch-on delay time and send values
- Function „monitoring" with reduced sensitivity only to detect walking persons
- Selected parameters can be configured remotely using the SendoPro remote control. Parameter settings are made via ETS
- Optional user remote control
- Test operation to check detection area, installation and brightness settings
- Parallel switching of several presence detectors (master-slave or master-master) possible
- Individual covers available on request

PlanoCentro EWH-A KNX

- For ceiling installation (false ceilings)
- With installation for false ceilings and cover

PlanoCentro UWH-A KNX

- For flush-mounting (concrete ceiling)
- With metal installation frame for screwed fixing in wooden ceilings or in flush-mounted sockets, incl. cover

Product selection

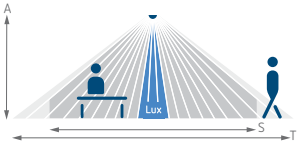
Installation type	Colour	Type	Article number
Ceiling mounting with mounting frame	Pure white (similar to RAL 9010)	PlanoCentro EWH-A KNX	2059102
	Black (similar to RAL 9005)	PlanoCentro EBK-A KNX	2059103
	Silver (similar to RAL 9006)	PlanoCentro ESR-A KNX	2059104
Ceiling installation (flush-mounting concrete)	Pure white (similar to RAL 9010)	PlanoCentro UWH-A KNX	2059202
	Black (similar to RAL 9005)	PlanoCentro UBK-A KNX	2059203
	Silver (similar to RAL 9006)	PlanoCentro USR-A KNX	2059204
	Additional colours available upon request		

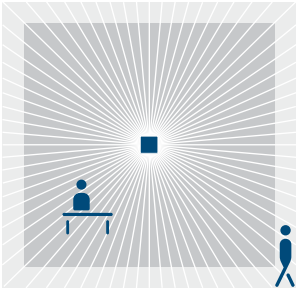
Technical data

	PlanoCentro KNX
Operating voltage KNX	Bus voltage, approx. 14 mA (18 mA LED on)
Installation height	2 – 3,5 m
Setting range brightness	approx. 5 – 2000 lx/measuring off
Light switch-off delay	30 s – 60 min
Stand-by dimming value	5 – 10 %
Stand-by time	30 s – 60 min/on
Presence switch-off delay	10 s – 120 min
Switch-on delay presence	10 s – 30 min/inactive
Ambient temperature	0 °C ... +50 °C
Type of protection	IP 40 (when fitted)

Detection range (Square)

Mounting height (A)	Walking (T)	Sitting (S)
2 m	36 m² | 6 m x 6 m ± 0,5 m	20 m² | 4,5 m x 4,5 m
2,5 m	64 m² | 8 m x 8 m ± 0,5 m	36 m² | 6 m x 6 m
3 m	81 m² | 9 m x 9 m ± 1 m	49 m² | 7 m x 7 m
3,5 m	100 m² | 10 m x 10 m ± 1 m	64 m² | 8 m x 8 m





Accessories



PlanoSets
for PlanoCentro E KNX
↳ Art.No.: 9070736
Details page 281



theSenda S
↳ Art.No.: 9070911
Details page 285



PlanoBox 1WH
for PlanoCentro U KNX
↳ Art.No.: 9070731
Details page 281

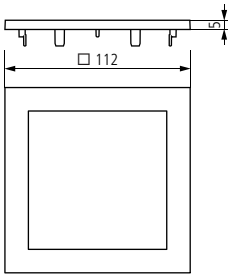
theSenda P
Details page 285

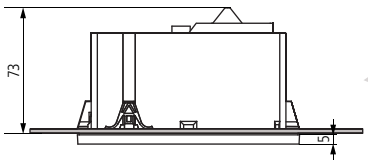
Junction casing,
115 x 115 x 100 mm
for PlanoCentro U KNX
Details page 281

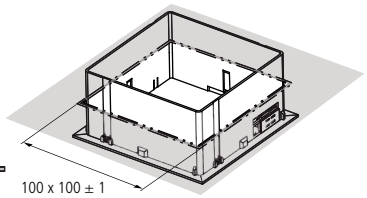
QuickSafe
Details page 282

SendoPro 868-A
Details page 283

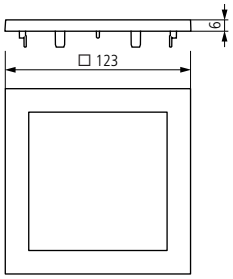
Scale drawings

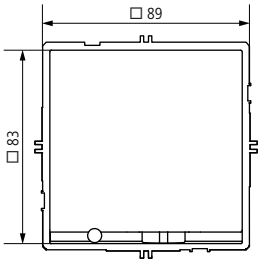


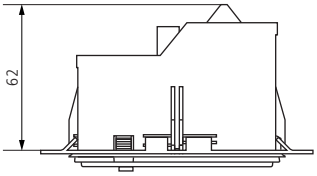


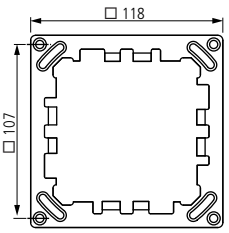


PlanoCentro EWH-A KNX









PlanoCentro UWH-A KNX



PresenceLight 180B-KNX

Description

- Presence detector (PIR)
- Automatic control of lighting depending on presence and brightness
- Integrated bus coupling
- IP 54 for versatile use
- Outputs light for controlling one or two lighting groups
- Mixed light measurement, suitable for fluorescent lamps (FL/PL/ESL), halogen/incandescent lamps and LEDs
- Switching or constant light control with stand-by function
- Adjustable sensitivity
- Choice of fully or semi automatic operation: In „Semi-automatic" mode the light must be switched on manually and switches off automatically
- Short presence; Reduced switch-off delay time in case of a short presence
- Channel presence with switch-off delay and switch-on delay time and send values
- Function „monitoring" with reduced sensitivity only to detect walking persons
- Channel brightness (Lux)
- Set brightness level via bus object
- Scene functionality (8-bit scenes)
- Selected parameters can be configured remotely using the SendoPro remote control. Parameter settings are made via ETS
- Optional user remote control
- Ready for use by ex-factory set items
- Test operation to check detection area and installation
- Parallel switching of several presence detectors (master-slave or master-master) possible
- Ceiling mounting in flush-mounted box
- Possibility of surface mounting by using a surface frame

Product selection

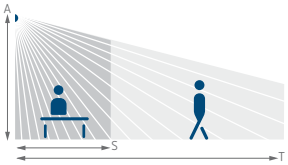
Installation type	Colour	Type	Article number
Wall installation	Pure white (similar to RAL 9010)	PresenceLight 180B-KNX WH	2009050
	Black (similar to RAL 9005)	PresenceLight 180B-KNX BK	2009815
	Silver (similar to RAL 9006)	PresenceLight 180B-KNX SR	2009816
	Additional colours available upon request		

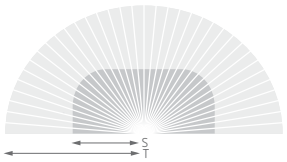
Technical data

	PresenceLight 180B-KNX
Operating voltage KNX	Bus voltage, approx. 13 mA (17 mA LED on)
Installation height	1,6–2,2 m
Setting range brightness	approx. 5–2000 lx/measuring off
Light switch-off delay	30 s–60 min
Stand-by dimming value	5–10 %
Stand-by time	30 s–60 min/on/inactive
Presence switch-off delay	10 s–120 min
Switch-on delay presence	10 s–30 min/inactive
Ambient temperature	–10 °C ... +50 °C
Type of protection	IP 54 (when fitted)

Detection range (Semicircular)

Mounting height (A)	Walking (T)	Sitting (S)
2,2 m	100 m² | 8 m	25 m² | 7 m x 3,5 m





Accessories



Surface frame PresenceLight
↳ Art.No.: 9070513
Details page 280



SendoPro 868-A
↳ Art.No.: 9070675
Details page 283

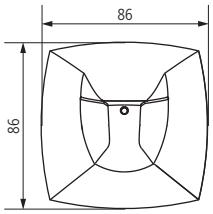


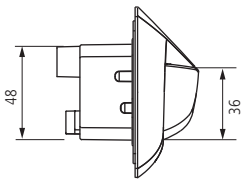
theSenda S
↳ Art.No.: 9070911
Details page 285

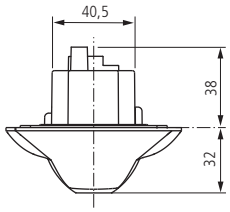


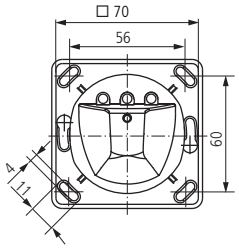
QuickSafe
↳ Art.No.: 9070531
Details page 282

Scale drawings











Description

- Motion detector (PIR)
- Automatic lighting control based on presence and brightness
- For integration into KNX building systems
- For outdoor use
- For installation on walls and ceilings
- Integrated temperature sensor
- For larger, commercial outdoors properties such as offices, public buildings, hotels, schools, car parks and warehouses
- Easy to program with KNX ETS software
- Adjustable brightness switching value and switch-off delay
- Sensitivity can be reduced
- Area limit via lens attachment
- Mixed light measurement
- Teach-in of current brightness value possible
- Pulse function
- Test function for checking detection area
- Installation on flush-mounted socket possible (60 mm)
- Single-handed plug-in installation
- Instant start-up possible via factory preset
- Controls are place protected
- Corner angle included
- Spacer and corner angle included

Product selection

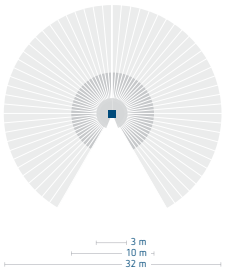
Installation type	Colour	Type	Article number
Wall and ceiling installation	White	theLuxa P300 KNX WH	1019610
	Black	theLuxa P300 KNX BK	1019611

Technical data

	theLuxa P300 KNX
Operating voltage KNX	Bus voltage, < 10 mA
Setting range brightness	1–3000 lx
Light switch-off delay	1 s–60 min
Ambient temperature	–25 °C ... +45 °C
Protection class	III
Type of protection	IP 55

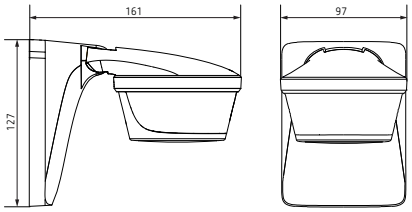
Detection range

Mounting height	Head on to	Diagonally
2 m	4 m	12 m
2,5 m	5 m	16 m
3 m	5 m	16 m
3,5 m	5 m	16 m
4 m	4 m	12 m



Walking diagonally to the detector
Walking head on to the detector
Creep under protection
Mounting height: 2.5 m

Scale drawings



Accessories

Corner angle theLuxa P
Details page 284

Spacer theLuxa P
Details page 283

theSenda P
Details page 285

theSenda S
Details page 285


SPHINX 331 S KNX

Description

- Motion detector (PIR)
- Automatic lighting control based on presence and brightness
- Integrated bus coupling
- With constant light control
- Lighting control „movement-dependent only „ and „movement and brightness dependent"
- Continuous constant light control / movement-dependent
- Following functions: e.g. lighting ON / OFF, shutters / blinds UP / DOWN, time functions (switch-off delay), locking the motion detector, dimming values, dimming UP / DOWN, Master / Slave function
- Flush fitting design (projects 4 mm from ceiling)

SPHINX 331 S KNX
- 1 channel

SPHINX 332 S KNX
- 2 channels
- Additional programming keys can activate the physical address via a programming magnet (if programming is being executed after installation)

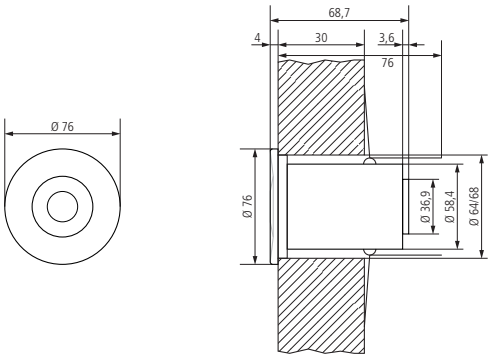
Product selection

Installation type	Type	Article number
Ceiling installation	SPHINX 331 S KNX	1079215
	SPHINX 332 S KNX	1079216

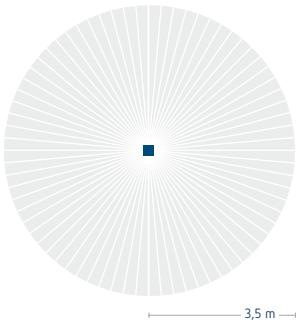
Technical data

	SPHINX 331 S KNX	SPHINX 332 S KNX
Operating voltage KNX	Bus voltage, ≤ 10 mA	
Setting range brightness	0 – 700 lx	
Light switch-off delay	1 s – 120 min	
Ambient temperature	– 5 °C ... +45 °C	
Protection class	II according to EN 60 730-1	
Type of protection	IP 40 (when fitted)	

Scale drawings

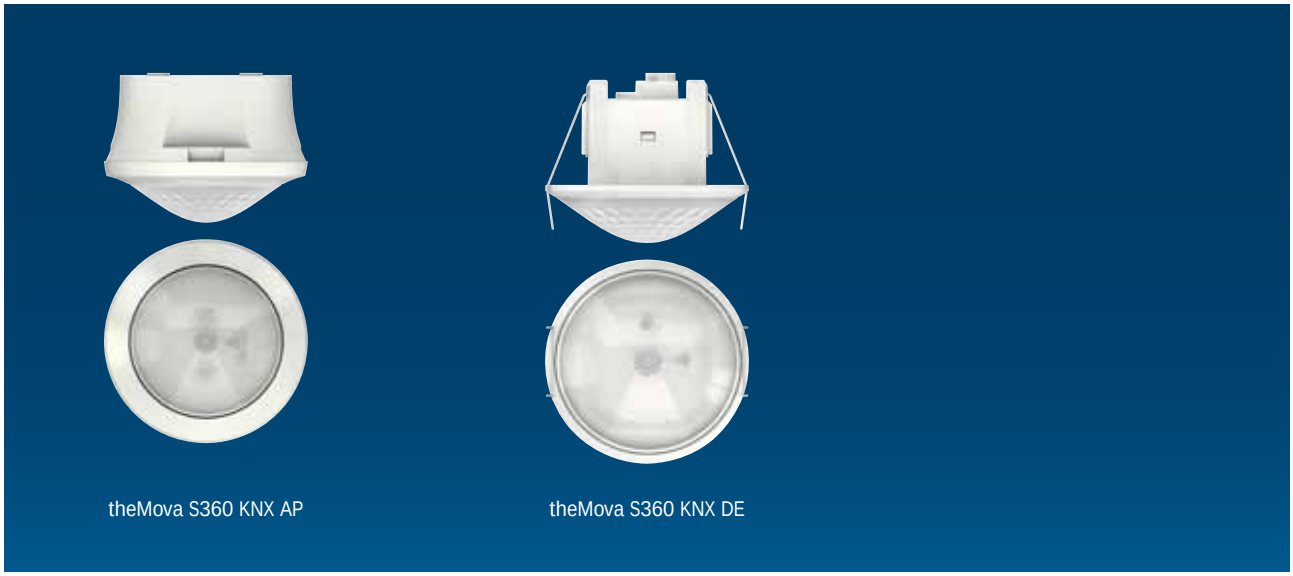


Detection range



Walking
Mounting height: 2-4 m
(Values valid at a mounting height of 2.5 m)

12



Description

- KNX Passive infrared motion detector for ceiling mounting
- Circular detection area 360°, up to Ø 9 m (64 m²)
- Mixed light measurement suitable for fluorescent (FL/PL/ESL), halogen/incandescent lamps and LEDs
- One lighting channels with one light measurement
- Switching operation
- Fully or semi-automatic
- Brightness switching value can be set in lux via parameters, the object or via remote control
- Teach-in of the brightness switching value
- Reduction of time delay when present briefly (short-term presence)
- Manual override by telegram or remote control
- One separate channel (presence) for controlling other devices such as HVAC systems with switch-on delay and time delay
- Master/Slave parallel switching for gap-free coverage of large areas
- Master/Master parallel switching for several lighting groups with separate light measurement, but joint presence detection
- Separate blocking objects for light and presence channel
- Detection and sending of current brightness
- Adjustable detection sensitivity
- Test mode for checking function and detection area
- Management remote control SendoPro 868-A (option)
- Installation remote control theSenda P (option)

Product selection

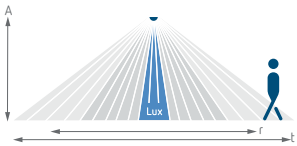
Installation type	Colour	Type	Article number
Ceiling installation	White	theMova S360 KNX AP WH	1039550
	Grey	theMova S360 KNX AP GR	1039551
Ceiling installation, flush-mounted	White	theMova S360 KNX DE WH	1039560
	Grey	theMova S360 KNX DE GR	1039561

Technical data

	theMova S360 KNX AP	theMova S360 KNX DE
Operating voltage KNX	Bus voltage, 9 mA	
Installation height	2 – 4 m	
Setting range brightness	approx. 30 – 3000 lx/measuring off	
Light switch-off delay	30 s – 60 min	
Presence switch-off delay	10 s – 120 min	
Switch-on delay presence	10 s – 30 min/inactive	
Ambient temperature	– 15 °C ... +50 °C	
Type of protection	IP 54	IP 54 (when fitted)

Detection range (Round)

Mounting height (A)	Head on to (r)	Diagonally (t)
2 m	5 m² | 2,5 m	38 m² | 7 m
2,5 m	7 m² | 3 m	38 m² | 7 m
3 m	13 m² | 4 m	50 m² | 8 m
3,5 m	13 m² | 4 m	50 m² | 8 m
4 m	13 m² | 4 m	64 m² | 9 m



Accessories



SendoPro 868-A
↳ Art.No.: 9070675
Details page 283

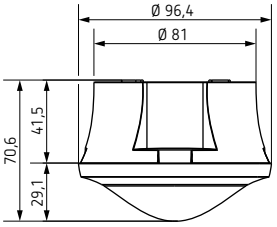


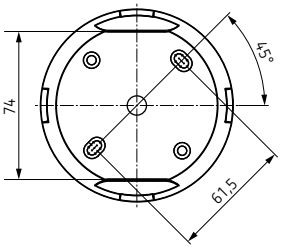
theSenda P
↳ Art.No.: 9070910
Details page 285



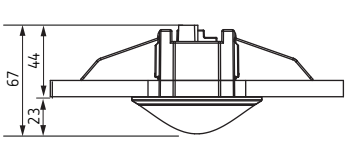
theSenda S
↳ Art.No.: 9070911
Details page 285

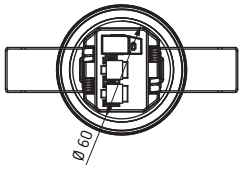
Scale drawings (theMova S360 KNX AP)





Scale drawings (theMova S360 KNX DE)






theMova P360 KNX UP WH

Description

- KNX Passive infrared motion detector for ceiling mounting
- Circular detection area 360°, up to Ø 24 m (452 m²)
- Restriction of detection area with cover clips
- Mixed light measurement suitable for fluorescent (FL/PL/ESL), halogen/incandescent lamps and LEDs
- One lighting channels with one light measurement
- Switching operation
- Fully or semi-automatic
- Brightness switching value can be set in lux via parameters, the object or via remote control
- Teach-in of the brightness switching value
- Reduction of time delay when present briefly (short-term presence)
- Manual override by telegram or remote control
- One separate channel (presence) for controlling other devices such as HVAC systems with switch-on delay and time delay
- Master/Slave parallel switching for gap-free coverage of large areas
- Master/Master parallel switching for several lighting groups with separate light measurement, but joint presence detection
- Separate blocking objects for light and presence channel
- Detection and sending of current brightness
- Adjustable detection sensitivity
- Test mode for checking function and detection area
- Management remote control SendoPro 868-A (option)
- Installation remote control theSenda P (option)

Product selection

Installation type	Colour	Type	Article number
Ceiling installation	White	theMova P360 KNX UP WH	1039600
	Grey	theMova P360 KNX UP GR	1039601

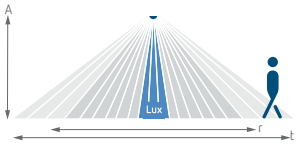
Technical data

	theMova P360 KNX UP
Operating voltage KNX	Bus voltage, 9 mA
Installation height	2 – 10 m
Setting range brightness	approx. 30 – 3000 lx/measuring off
Light switch-off delay	30 s – 60 min
Presence switch-off delay	10 s – 120 min
Switch-on delay presence	10 s – 30 min/inactive
Ambient temperature	–15 °C ... +50 °C
Type of protection	IP 54 (when fitted)

Detection range (Round)

Mounting height (A)	Head on to (r)	Diagonally (t)
2 m	28 m² | 6 m	380 m² | 22 m
2,5 m	38 m² | 7 m	415 m² | 23 m
3 m	50 m² | 8 m	452 m² | 24 m
3,5 m	50 m² | 8 m	452 m² | 24 m
6 m	50 m² | 8 m	452 m² | 24 m
10 m	50 m² | 8 m	491 m² | 25 m

With a mounting height of more than 3.5 m and increasing temperatures the sensitivity of the detector decreases. Extent and distance between the active and passive zones also increases and the detection areas of several detectors should overlap in the marginal zone.



Accessories



Surface frame 110A WH
↳ Art.No.: 9070912
Details page 280



theSenda P
↳ Art.No.: 9070910
Details page 285



theSenda S
↳ Art.No.: 9070911
Details page 285

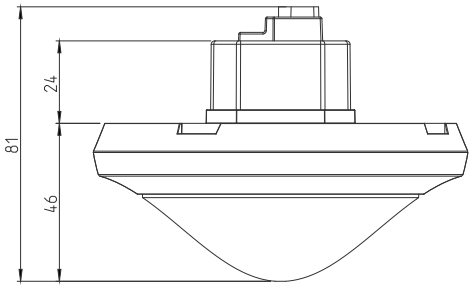
QuickSafe
Details page 282

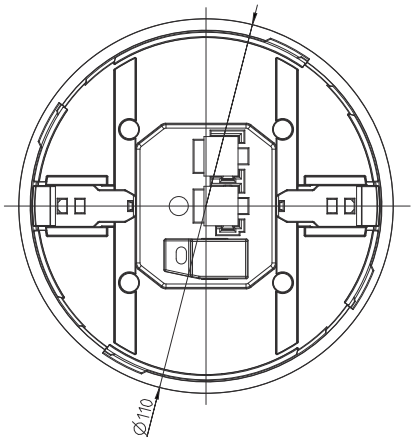
Masking clip
Details page 281

Ceiling installation box 73A
Details page 281

SendoPro 868-A
Details page 283

Scale drawings





KNX, Weather station, brightness sensor



Description

Meteodata 140 S KNX

- Self contained outdoor weather station
- For measuring wind, rain, brightness and temperature
- For fully automatic blinds and sun protection control with automatic adjustment of blinds according to position of the sun
- Rain sensor with integrated heating
- The weather station can also be operated without mains supply. The heating of the rain sensor will not function then
- Measurement and evaluation directly on device
- Sun protection for up to eight facades via 3 integrated brightness sensors
- 8 sun protection channels
- 4 additional threshold channels for connection of external KNX sensors
- 6 logic channels
- Display of weather data e.g. with VARIA 826 KNX multi-function display

Meteodata 140 S GPS KNX

As Meteodata 140 S KNX, but

- Integrated GPS receiver
- Automatic calculation of elevation and azimuth
- The weather station can also be operated without mains supply. The GPS module will not function then

Meteodata 140 basic KNX

As Meteodata 140 KS NX, but:

- Without rain sensor
- No automatic adjustment of blinds according to position of the sun
- 3 sun protection channels

Product selection

Detection	GPS module integrated	Operating voltage	Type	Article number
Wind, Rain, Brightness, Temperature	–	110–230 V AC	Meteodata 140 S KNX	1409207
Wind, Brightness, Temperature	–	–	Meteodata 140 basic KNX	1409205
Wind, Rain, Brightness, Temperature	√	110–230 V AC	Meteodata 140 S GPS KNX	1409208
Wind, Rain, Brightness, Temperature	–	15–34 V DC	Meteodata 140 S 24V KNX	1409201
Wind, Rain, Brightness, Temperature	√	15–34 V DC	Meteodata 140 S 24V GPS KNX	1409204

Technical data

	Meteodata 140 S GPS KNX	Meteodata 140 S KNX	Meteodata 140 S 24V GPS KNX	Meteodata 140 S 24V KNX	Meteodata 140 basic KNX
Operating voltage	110–230 V AC		15–34 V DC		–
Frequency	50–60 Hz		–		
Operating voltage KNX	Bus voltage, ≤ 10 mA				
Stand-by consumption	< 0,5 W				
Measuring range brightness	1–100000 lx				
Measuring range temperature	–30 °C ... +60 °C				
Measuring range wind speed	2–30 m/s				
Ambient temperature	–20 °C ... +55 °C				
Protection class	II		III		II
Type of protection	IP 44				

Accessories

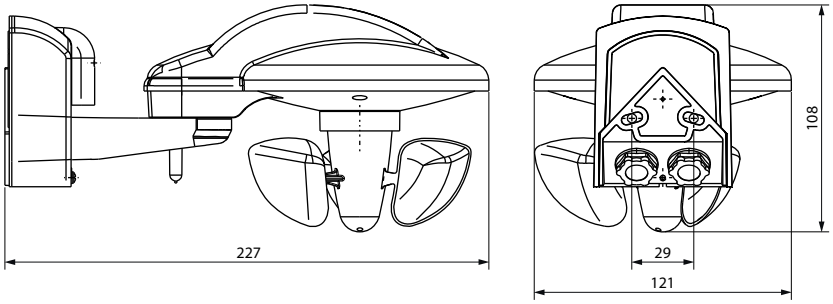


Mast mounting S
↳ Art.No.: 9070928
Details page 288



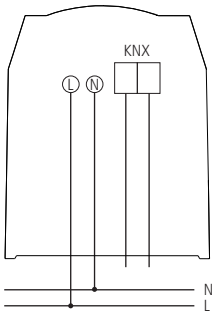
Power unit 24 V DC
for Meteodata 140 24V KNX
↳ Art.No.: 9079330
Details page 289

Scale drawings



Meteodata 140 KNX

Connection diagrams




Meteodata 139 KNX

Description

- Weather forecast receiver
- Recieves weather data from the HKW via longwave on hours of sunlight, probability of rain, wind speeds and temperatures
- (This service is not available in all European countries. Find out more at www.efr.de/en)
- Weather forecasts for the next 3 days are shown in 6 hour blocks
- In addition, weather scenarios such as „fine", „cloudy", „rainy", among others, and storm warnings are also received
- Data can be visualised purely for information purposes
- By using the data, heating and shade can be controlled with foresight
- Exact time entry in the KNX system thanks to a time signal sent with the weather data
- Provision and transmission of the weather data by HKW is currently guaranteed until 2021-12-31. Any termination of the transmission will be announced on the website, at least 5 years in advance

Product selection

Type	Article number
Meteodata 139 KNX	1399200

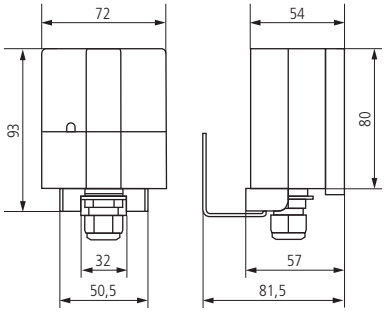
Technical data

	Meteodata 139 KNX
Operating voltage KNX	Bus voltage, ≤ 12 mA
Ambient temperature	–20 °C ... +55 °C
Protection class	III
Type of protection	IP 54

Accessories


Mast mounting S
↳ Art.No.: 9070928
Details page 288

Scale drawings





LUNA 134 KNX

Description

- Light level controller
- External light sensor included in delivery
- For brightness-dependent controlling
- 10 channels
- 4 threshold values channels for connecting external KNX-sensors (e.g. temperature)
- 6 logic channels
- Up to 3 lights sensors can be connected
- Manual operation on device
- 4 keys for setting threshold and switch on/off delay
- DuoFix spring terminals
- Display back light (can be turned off)
- Thresholds can be shown or changed on display
- PIN coding

Product selection

Type	Article number
LUNA 134 KNX	1349200

Technical data

	LUNA 134 KNX
Operating voltage	110 – 240 V AC
Frequency	50 – 60 Hz
Operating voltage KNX	Bus voltage, ≤ 10 mA
Stand-by consumption	0,8 W
Measuring range brightness	1 – 100000 lx
On/off switching delay	0 – 20 min
Width	3 modules
Ambient temperature	–5 °C ... +45 °C
Protection class	II
Type of protection	IP 20

Accessories



Digital surface-mounted light sensor
↳ Art.No.: 9070415
Details page 285



Digital flush-mounted light sensor
↳ Art.No.: 9070456
Details page 285



LUNA 131 S KNX

Description

- Brightness and temperature sensor
- For brightness and temperature dependent controlling in outdoor areas
- 5 freely configurable channels: 1 sun protection channel and 4 universal channels
- Sun protection channel with automated sun protection especially for blind, awning and shutter applications
- Universal channels allow linking of brightness and temperature
- Brightness range from 1 - 100,000 lux
- Temperature range –20 °C to + 55 °C
- Learning object for brightness threshold

Product selection

Type	Article number
LUNA 131 S KNX	1319201

Technical data

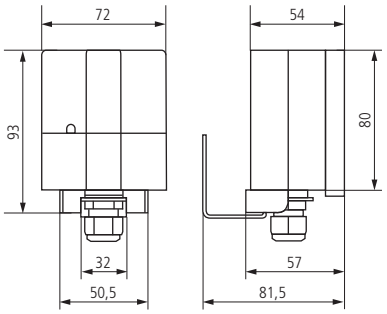
	LUNA 131 S KNX
Operating voltage KNX	Bus voltage, ≤ 5 mA
Measuring range brightness	1 – 100000 lx
Measuring range temperature	–20 °C ... +55 °C
Ambient temperature	–25 °C ... +55 °C
Type of protection	IP 54

Accessories



Mast mounting S
↳ Art.No.: 9070928
Details page 288

Scale drawings



LUNA 131 S KNX

12



LUNA 133 KNX

Description

- Brightness sensor
- For brightness dependent controlling in outdoor areas
- Brightness range from 1 – 100,000 lux
- Ideally combinable with the Theben weather stations for individual control of several facades

Product selection

Type	Article number
LUNA 133 KNX	1339200

Technical data

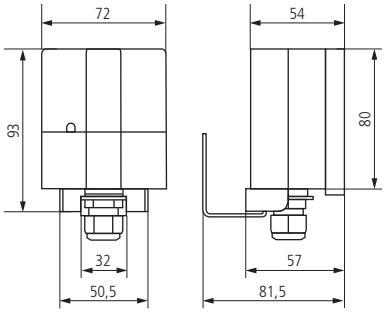
	LUNA 133 KNX
Operating voltage KNX	Bus voltage, ≤5 mA
Measuring range brightness	1 – 100000 lx
Ambient temperature	– 25 °C ... +55 °C
Type of protection	IP 54

Accessories



Mast mounting S
↳ Art.No.: 9070928
Details page 288

Scale drawings



LUNA 133 KNX



TR 648 top2 RC KNX

TR 648 top2 RC-DCF KNX

Description

Common functions

- Digital time switch with yearly and astronomical time program
- 8 channels
- DuoFix spring terminals for 2 conductors each
- Text-oriented user guidance in display
- 800 memory locations
- Interface for OBELISK top2 memory card (PC programming)
- 8 year power reserve (lithium battery)
- ON-OFF switching times
- Pulse program
- Cycle program
- Extensive yearly clock functions
- Astronomical switching function (automatic calculation of sunrise and sunset times for the whole year)
- Switching preselection
- Permanent switching ON/OFF
- Count-down timer
- Integrated hour counter
- Holiday program
- 2 random programs
- Display backlight (can be turned off)
- PIN coding
- Automatic summer/winter time changeover
- Time and date synchronisation of other bus participants

TR 648 top2 RC KNX

- Time synchronisation via connection of external DCF or GPS antennas, additional posititioning for astronomical program with GPS

TR 648 top2 RC-DCF KNX

- Time synchronisation via connection of external DCF antenna
- Can be operated without mains supply

Product selection

Type	Article number
TR 648 top2 RC KNX	6489212
TR 648 top2 RC-DCF KNX	6489210

Technical data

	TR 648 top2 RC KNX	TR 648 top2 RC-DCF KNX
Operating voltage KNX	Bus voltage, ≤ 12 mA	
Operating voltage	110–240 V AC	–
Frequency	50–60 Hz	–
Stand-by consumption	0,2 W	–
Width	3 modules	
Number of channels	8	
Number of memory locations	800	
Time accuracy at 25 °C	≤ ± 0,5 s/day (quartz) or DCF77/GPS	≤ ± 0,5 s/day (quartz) or DCF77
Shortest switching times	1 s	
Display	LCD	
Ambient temperature	–5 °C ... +45 °C	
Type of protection	IP 20	
Protection class	II according to EN 60 730-1	III according to EN 60 730-1

Accessories



Antenna top2 RC-GPS
for TR 648 top2 RC KNX
↳ Art.No.: 9070610
Details page 279



Antenna top2 RC-DCF
↳ Art.No.: 9070410
Details page 279

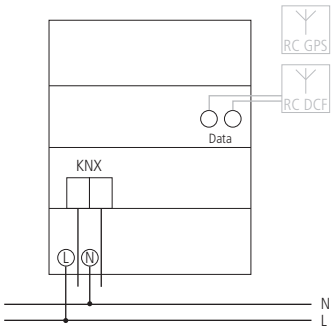


PC set OBELISK top2
↳ Art.No.: 9070409
Details page 279

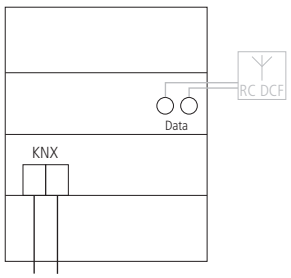


Memory card OBELISK top2
↳ Art.No.: 9070404
Details page 279

Connection diagrams



TR 648 top2 RC KNX



TR 648 top2 RC-DCF KNX



ZS 600 DCF KNX

Description

- Time transmitter for hour and date
- Can also be used with DCF77 antenna
- LED for status display DCF reception
- Integrated voltage supply for DCF77 antenna
- Preset time and date (CET or CEST)
- Automatic summer / winter time switchover

Product selection

Type	Article number
ZS 600 DCF KNX	6009200

Technical data

	ZS 600 DCF KNX
Operating voltage KNX	Bus voltage, ≤ 10 mA
Width	2 modules
Power reserve	10 years
Time accuracy at 25 °C	≤ ± 1 s / day (quartz) or DCF77 synchronous
Ambient temperature	–10 °C ... +50 °C
Protection class	III according to EN 60 730-1
Type of protection	IP 20

Accessories

Antenna DCF77 KNX
↳ Art.No.: 9070271
Details page 279





DALI Gateway KNX

Description

- The DALI Gateway KNX serves as an interface between the the DALI and the KNX system
- The group-oriented DALI gateway (16 groups) is used to control operating devices equipped with a DALI interface (e.g. electronic ballasts, LED converters, transformers etc.)
- A maximum of 64 DALI members can be connected to a DALI output. Every DALI member automatically receives a random DALI address through the gateway
- The assignment of the individual DALI members in groups of lights is performed using a separate software tool. Every group of lights can be addressed and monitored via the KNX

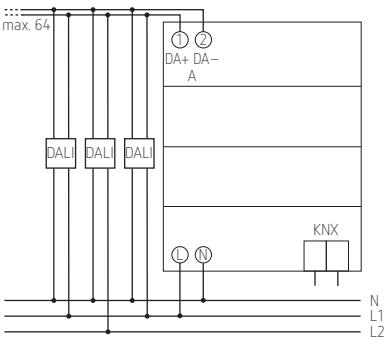
Product selection

Type	Article number
DALI Gateway KNX	9070722

Technical data

	DALI Gateway KNX
Operating voltage KNX	Bus voltage, < 10 mA
Operating voltage	110–240 V AC/DC
Frequency	50–60 Hz
Width	4 modules
Ambient temperature	–5 °C ... +45 °C
Protection class	II
Type of protection	IP 20

Connection diagrams



DALI Gateway KNX



KNX-OT-Box S

Description

- The KNT-OT-Box S serves as an interface between the boilers with OpenTherm (bus system in heating and ventilation technology) and the KNX system (building system technology)
- This enables the bidirectional exchange of data between the OpenTherm boiler and the heat distribution via the KNX system (individual room control)
- In combination with the OT-Box (9070712) from the RAMSES 856 top2 OT (8569132) also heating systems without OpenTherm interface can be controlled
- Device and KNX bus module can be swapped independently of each other
- Removable KNX bus module
- Button for OT-test-program
- The following functions are available with the KNT- OT-box:
- Customised flow control
- Weather-compensation flow control
- Control of domestic hot water
- Energy optimization of domestic hot water with solar support
- Legionella protection program
- Screed drying program

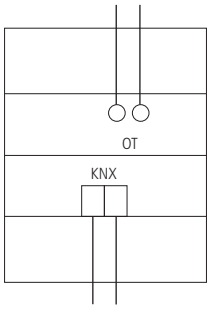
Product selection

Type	Article number
KNX-OT-Box S	8559201

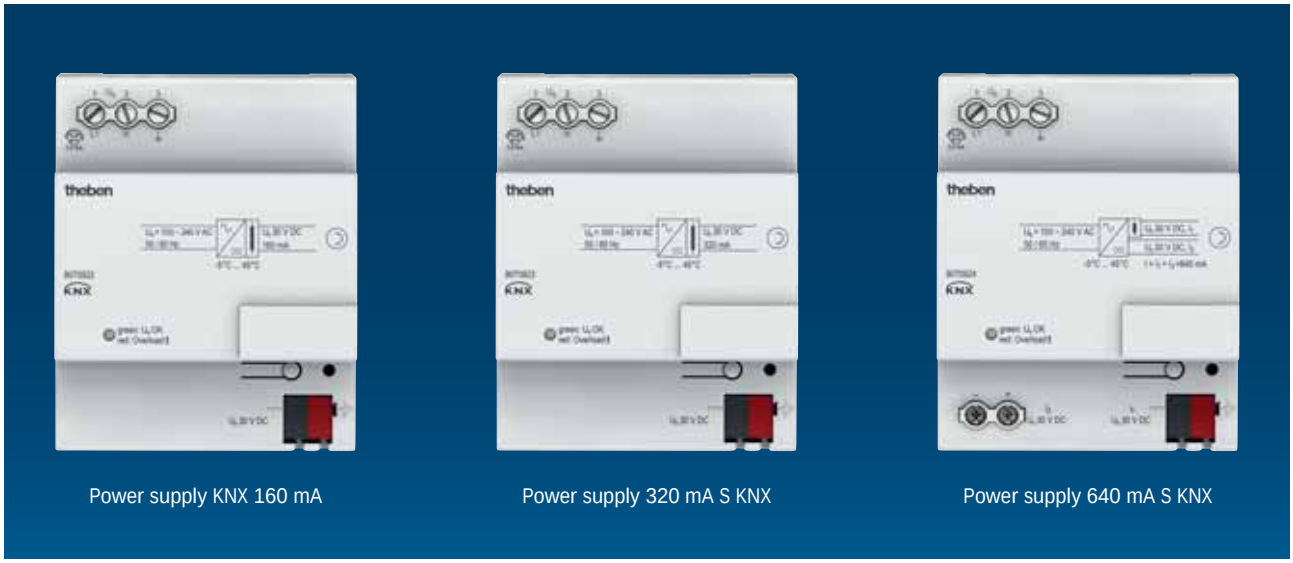
Technical data

	KNX-OT-Box S
Operating voltage KNX	Bus voltage, ≤ 10 mA
Width	4 modules
Rated impulse with stand voltage	4 kV
Ambient temperature	0 °C ... +45 °C
Protection class	III
Type of protection	IP 20

Connection diagrams



KNX-OT-Box S



Power supply KNX 160 mA | Power supply 320 mA S KNX | Power supply 640 mA S KNX

Description

Common functions
- Power-supplying and monitoring of the KNX system voltage
- Reset key for 20 s bus reset
- Continuous short-circuit protection

Power supply KNX 160 mA
- 160 mA supply voltage

Power supply 320 mA S KNX
- 320 mA supply voltage

Power supply 640 mA S KNX
- 640 mA supply voltage
- 30 V DC auxiliary supply

Product selection

Type	Article number
Power supply 160 mA S KNX	9070922
Power supply 320 mA S KNX	9070923
Power supply 640 mA S KNX	9070924

Technical data

	Power supply 160 mA S KNX	Power supply 320 mA S KNX	Power supply 640 mA S KNX
Operating voltage KNX	Bus voltage, ≤ 12 mA		
Operating voltage	100–240 V AC		
Frequency	50–60 Hz		
Stand-by consumption	≤ 0,7 W		
Width	4 modules		
KNX output	1 line with integrated throttle drive		
Nominal voltage KNX	30 V DC, ± 2 V, SELV		
Nominal current KNX	160 mA	320 mA	640 mA
Uninterrupted short-circuit current	max. 0,5 A	max. 0,8 A	max. 1,4 A
Mains failure bridging time	min. 200 ms		
Ambient temperature	–5 °C … +45 °C		
Protection class	II according to EN 60 730-1		
Type of protection	IP 20		

Additional technical data at: www.theben.de/product/ Articlenumber



Interface USB KNX



Line coupler S KNX

Description

Interface USB KNX

- USB interface
- For communication between PC and the KNX equipment to be programmed
- USB LED and KNX LED to display data transmission
- Usable from ETS3

Line coupler S KNX

- Line coupler
- For connecting KNX lines or areas
- Galvanic separation of the lines/areas
- Bus terminals for main line and subordinate line
- Telegrams can be filtered (to reduce telegram traffic)
- Can also be used as line amplifier (repeater)

Product selection

Type	Article number
Interface USB KNX	9070397
Line coupler S KNX	9070880

Technical data

	Interface USB KNX	Line coupler S KNX
Operating voltage KNX	Bus voltage, ≤ 10 mA	
Operating voltage	–	24 V DC
Width	2 modules	
Ambient temperature	–5 °C ... +45 °C	
Protection class	II according to EN 60 730-1	III
Type of protection	IP 20	



OSIRIA 220 / 230 / 240 AR KNX

OSIRIA 230 SR KNX, OSIRIA 240 SR KNX

OSIRIA 241 BR KNX, OSIRIA 241 AR KNX

Description

OSIRIA 220 AR KNX, OSIRIA 230 AR KNX, OSIRIA 240 AR KNX

- KNX indoor clock, round, single-sided
- Black bar hour and minute hands, red second hand
- White metallic dial with black arabic numerals
- Impact-resistant plastic housing
- Matte border
- Flat, shock-resistant Plexiglas
- Diameter clock face: 250 mm / 300 mm / 400 mm

OSIRIA 230 SR KNX, OSIRIA 240 SR KNX

- KNX indoor clock, round, single-sided
- Black bar hour and minute hands, red second hand
- White metallic dial with black fine-line numerals
- Impact-resistant plastic housing
- Matte border
- Flat, shock-resistant Plexiglas
- Diameter clock face: 300 mm / 400 mm

OSIRIA 241 BR KNX, OSIRIA 241 AR KNX

- KNX indoor clock, round, single-sided
- Silver metallic painted metallic housing (RAL 9006 whitealuminium)
- Black bar hour and minute hands, red second hand
- White metallic dial with black DIN bar numerals or arabic numbers
- Curved, shock-resistant Plexiglas
- Diameter clock face: 400 mm

Product selection

Dial dimensions	Housing material	Type of numerals	Type	Article number
Ø 250 mm	Plastic housing	Arabic numerals	OSIRIA 220 AR KNX	5009200
Ø 300 mm	Plastic housing	Arabic numerals	OSIRIA 230 AR KNX	5009210
		Fineline numerals	OSIRIA 230 SR KNX	5009211
Ø 400 mm	Plastic housing	Arabic numerals	OSIRIA 240 AR KNX	5009230
		Fineline numerals	OSIRIA 240 SR KNX	5009231
	Silver metallic painted metallic housing	Arabic numerals	OSIRIA 241 AR KNX	5009240
		Bar numerals	OSIRIA 241 BR KNX	5009241



OSIRIA 242 AR KNX, OSIRIA 242 SR KNX

OSIRIA 251 BQ KNX

OSIRIA 232 BQ KNX

Description

OSIRIA 242 AR KNX, OSIRIA 242 SR KNX

- KNX indoor clock, round, double-sided
- With wall or ceiling holder (150 mm)
- White dials
- Black Arabic numerals
- Black bar hour and minute hands, red second hand
- White painted metallic housing
- Shock-resistant plexiglass
- Diameter clock face: 400 mm

OSIRIA 251 BQ KNX

- KNX indoor clock, square, single-sided
- Wall clock limited protected against thrown balls e.g. for sports halls, schools, etc.
- White metallic dial with black DIN bar numerals
- Black bar hour and minute hands, red second hand
- Single-faced, robust, white painted metallic housing (RAL 9016) for heavy-duty applications
- Laminated safety glass
- 3-point fastening resistant to being pried out
- Clock face: 400 mm x 400 mm

OSIRIA 232 BQ KNX

- KNX indoor clock, square, single-sided, for flush-mounted installation (for OP rooms)
- White metallic dial with black DIN bar numerals
- Black bar hour and minute hands, red second hand
- Stainless steel housing frame flush with tiles or wall V4A for wall installation (flush-mounted)
- Resistant to acids, cleaning agents and disinfectants; in the installed state protected against dust and water in acc. with protection rating IP 54 (DIN 40050)
- 3 mm flat mineral lens
- Clock face: 250 x 250 mm

Product selection

Dial dimensions	Housing material	Type of numerals	Type	Article number
Ø 400 mm	White painted metallic housing	Arabic numerals	OSIRIA 242 AR KNX	5009250
		Fineline numerals	OSIRIA 242 SR KNX	5009251
400 mm x 400 mm	White painted metallic housing	Bar numerals	OSIRIA 251 BQ KNX	5009252
250 mm x 250 mm	Rustproof high quality steel housing	Bar numerals	OSIRIA 232 BQ KNX	5009223



theServa S110



Graph

Description

- theServa S110 is a high-performance KNX visualisation solution for lighting, awning and climate control via smartphone and tablet
- The intuitive app user interface is able to control devices, and also:
  - Display status and alarm messages and measured values as text or via pre-defined symbols
  - Show energy consumption in graphic format
  - Mix colours of RGB LEDs using a colour wheel
  - Integrate images from IP cameras
  - Control audio/video devices from almost all leading manufacturers via IR transmitter from IRTrans
  - Display current weather data and forecasts from the Internet or via KNX weather stations
  - Program time switch and calendar functions, as well as scenes
- In addition to the functions above, theServa offers a complete range of other functions that run in the background, including:
  - Presence simulation
  - Solar position calculation with sunrise and sunset
  - Logic, multiplexer and filter functions
  - Linear combination
  - Calculation of complex mathematical functions
  - Notification via email and push notifications (iOS only)
  - Load management for automatic shut-down of consumers
- Configuration is via theServa configurator. A theServa S110 miniserver from Theben is required to operate the software. Further information is available from the Theben website at www.theben.de

Product selection

Type	Article number
theServa S110	8254100

Technical data

	theServa S110
Operating voltage	110–240 V AC
Frequency	50–60 Hz
Stand-by consumption	< 1 W
Ambient temperature	0 °C ... +50 °C
Type of protection	IP 20



Light scene

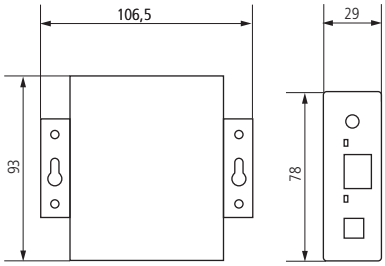


Time program



List view

Scale drawings



More information

App download

Open to new perspectives

Sometimes you need to change perspective to discover new possibilities. Then you establish that you're not just going further, but upwards. Theben always takes the viewpoint of its customers. First, to develop products that meet the requirements of people who will use them. Second, to be open to new technologies. So we are, as it were, programmed to change perspective systematically. For us it's a central value: openness.



	Beschreibung	Type	Page
Switching			
	LUXOR switching	LUXOR 400	262
		LUXOR 404	262
		LUXOR 402	262
Dimming			
	LUXOR dimming	LUXOR 405	264
Shutter control			
	LUXOR shutter control	LUXOR 408 S	265
		LUXOR 409 S	265
Weather sensors			
	LUXOR weather sensors	LUXOR 411	266
		LUXOR 440	266
Multifunction display			
	LUXOR display	LUXOR 426	268
Clock module			
	LUXOR clock module	LUXOR 414	270
LUXOR Sets			
	LUXOR sets	LUXOR Set 4	271
		LUXOR Set 5	271



LUXOR 400



LUXOR 404



LUXOR 402

Description

Common functions

- Modular expandable system with central functions
- For switching electrical consumers
- Manual switch on device
- LEDs to display
- 2 time functions (staircase light function with switch-off warning, lag function)
- Upgradeable for up to 16 LUXOR modules
- Central ON/OFF, panic function and presence simulation
- LUXOR modules are connected via 2-wire bus cable (COM bus)
- Max. input cable length up to 100 m
- Input separate for connecting FI (RCD)
- Universal voltage input: 8–48 V AC/DC (e. g. for intercoms)
- Control for configuring central functions

LUXOR 400

- 4-channel base device for lighting control
- Selector switch for configuring central functions
- Inputs U1 and I4 floating

LUXOR 404

- 4-channel upgrade device for lighting control
- Input I4 potential-free

LUXOR 402

- 2-channel upgrade device for lighting control

Product selection

Type	Article number
LUXOR 400	4000000
LUXOR 404	4040000
LUXOR 402	4020000

Technical data

	LUXOR 400	LUXOR 404	LUXOR 402
Operating voltage	230 V AC		
Frequency	50 Hz		
Width	4 modules		2,5 modules
Installation type	DIN rail		
Stand-by consumption	1,7 W	1,3 W	
Number of channels	4		2
Type of contact	NO contact		
Connecting cable	230 V phase-independent supply cable, max. cable length 100 m		
Connection for COM	EIB / KNX bus line type YCYM or Y(ST)Y or communication line J-Y(ST)Y / length up to 100 m		
Switching capacity	16 A (at 250 V AC, cos φ = 1), 6 A (at 250 V AC, cos φ = 0.6)		
Ambient temperature	–10 °C ... +50 °C		
Type of protection	IP 20		
Protection class	II according to EN 60 730-1		

Accessories

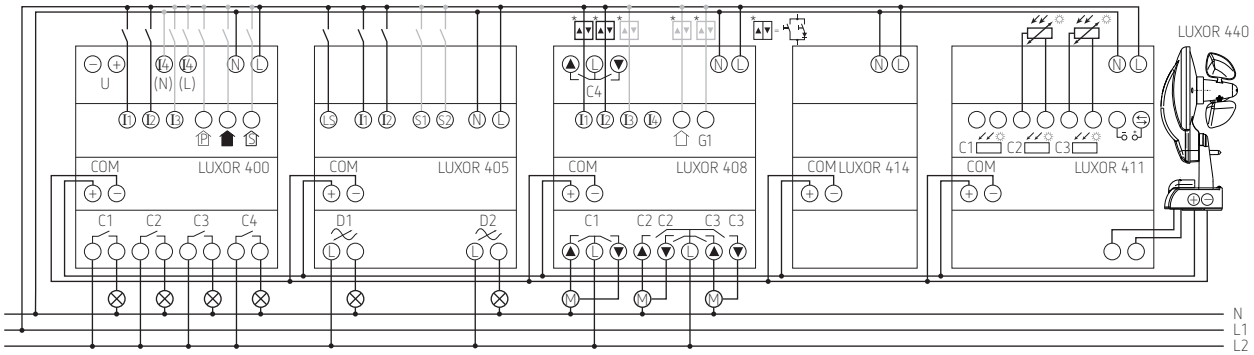


Diode module
↳ Art.No.: 9070367
Details page 286



Front panel kit
↳ Art.No.: 9070001
Details page 278

Connection diagrams





LUXOR 405



DMB 2 S KNX

Description

LUXOR 405

- 2-channel universal dimmer
- For dimming electric consumers such as incandescent lamps, high-voltage halogen lamps, low-voltage halogen lamps with conventional or electronic transformers
- 300 W/VA (for 2 channels) or 500 W/VA (for 1 channel)
- For conventional and electronic transformers
- Can also be used without base module
- Manual switch on device
- LEDs to display
- Upgradeable for up to 16 LUXOR modules
- LUXOR modules are connected via 2-wire bus cable (COM bus)
- One additional input per channel for motion detector
- With overcurrent display
- Input for up to 3 light settings
- 4 program options for dimming response
- Central functions: Presence simulation, central OFF, panic function, central ON

DMB 2 S KNX

- 2 channel dimming output extension module ‚Dimmbooster'
- To double the output of base and extension dimming actuators modules. e.g. to: 2 x 600 W/VA (2 channels) or 1 x 1,000 W/VA (1 channel)

Product selection

Type	Article number
LUXOR 405	4050000
DMB 2 S	4910272

Technical data

	LUXOR 405	DMB 2 S
Operating voltage	230 V AC	
Frequency	50 Hz	
Width	4 modules	
Installation type	DIN rail	
Stand-by consumption	1,0 W	0,8 W
Number of channels	2	
Type of contact	Triacs	
Connecting cable	230 V phase-independent supply cable, max. cable length 100 m	
Connection for COM	EIB/KNX bus line type YCYM or Y(ST)Y or communication line J-Y(ST)Y/length up to 100 m	
Ambient temperature	–10 °C ... +50 °C	
Type of protection	IP 20	
Protection class	II according to EN 60 730-1	



LUXOR 408 S



LUXOR 409 S

Description

Common functions

- For controlling shutters, awnings or blinds
- Separate control of 4 shutters with UP/DOWN/STOP
- Manual switch on device
- LEDs to display
- Controllable via standard shutter sensor
- Upgradeable for up to 16 LUXOR modules
- LUXOR modules are connected via 2-wire bus cable (COM bus)
- Setting option for panic function (via LUXOR 400)
- Storable intermediate position and turn for shading and ventilation
- 2 diode modules (9070367) supplied in delivery

LUXOR 408 S

- 4-channel roller shutter base module
- Central UP/DOWN, panic 1 group
- With three group functions (individual, group and central control)
- Expandable via channel upgrade modules, time and sensor module and weather station

LUXOR 409 S

- 4-channel shutter upgrade module

Product selection

Type	Article number	
LUXOR 408 S	4080100	246,40
LUXOR 409 S	4090100	246,40

Product selection

Type	Article number
LUXOR 408 S	4080100
LUXOR 409 S	4090100

Accessories



Diode module
↳ Art.No.: 9070367
Details page 286

Technical data

	LUXOR 408 S	LUXOR 409 S
Operating voltage	230 V AC	
Frequency	50 Hz	
Width	4 modules	
Installation type	DIN rail	
Stand-by consumption	1,3 W	
Number of channels	4	
Type of contact	NO contact	
Connecting cable	230 V phase-independent supply cable, max. cable length 100 m	
Connection for COM	EIB/KNX bus line type YCYM or Y(ST)Y or communication line J-Y(ST)Y/length up to 100 m	
Switching capacity	6 A (at 250 V AC, cos φ = 1)	
Functions channels	Shutter, blinds and awning control	
Ambient temperature	–10 °C ... +50 °C	
Type of protection	IP 20	
Protection class	II according to EN 60 730-1	



LUXOR 411



LUXOR 440

Description

LUXOR 411

- Sensor module
- For controlling awnings, shutters and blinds in combination with LUXOR 440, LUXOR 408 S and/or LUXOR 409 S and integrated light sensors
- Setting threshold values on device
- LEDs to display
- Max. input cable length of sensor line is 100 m
- LUXOR modules are connected via 2-wire bus cable (COM bus)

LUXOR 440

- Weather sensor
- For controlling awnings, shutters and blinds depending on rain, wind velocity, temperature and brightness in combination with sensor module LUXOR 411, LUXOR 408 S and/or LUXOR 409 S
- Optional connection of up to two additional light sensors for additional facades

Product selection

Type	Article number
LUXOR 411	4110000
LUXOR 440	4400000

Technical data

	LUXOR 411	LUXOR 440
Operating voltage	230 V AC	COM-Bus
Frequency	50 Hz	–
Width	4 modules	–
Stand-by consumption	1,1 W	–
Installation type	DIN rail	Wall installation or mast bracket
Connection for COM	EIB / KNX bus line type YCYM or Y(ST)Y or communication line J-Y(ST)Y / length up to 100 m	
Setting range twilight value	1 – 100 lx	
Setting range sun protection	1000 – 100000 lx	
Measuring range wind speed	2 – 20 m / s	
Measuring range temperature	0 °C ... +60 °C	– 30 °C ... +60 °C
Ambient temperature	– 10 °C ... +50 °C	– 20 °C ... +55 °C
Type of protection	IP 20	IP 44
Protection class	II according to EN 60 730-1	

Accessories

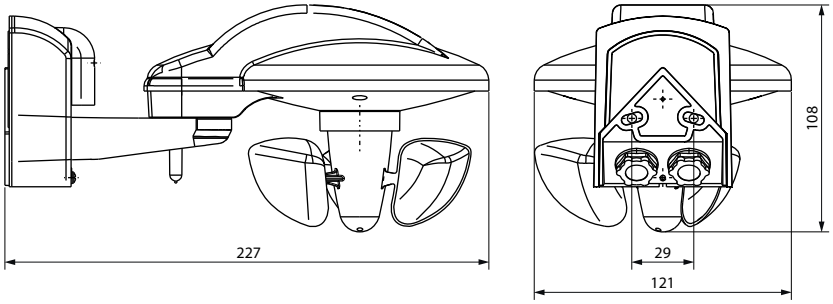


Surface-mounted light sensor
for LUXOR 411
↳ Art.No.: 9070008
Details page 285



Mast mounting S
for LUXOR 440
↳ Art.No.: 9070928
Details page 288

Scale drawings



Living comfort control, Multifunction display



LUXOR 426

Description

- Central display and control unit for the LUXOR system
- Time, weekday, date as well as central and automatic functions are displayed
- Current weather conditions are displayed as well as min / max values
- Display with back-lighting
- Favourite sites can be selected from 6 pages
- 8 channel time switch
- Heating temperature reduction in combination with a RAMSES room thermostat
- Manual switching on the device for central and group functions as well as manual and automatic mode
- Daily and weekly programs
- Astronomical program (dependent on sunrise and sunset)
- Freely programmable switching times as well as pre-programmed astronomical switching times
- Offset setting ± 120 min
- Easy location input via city list
- Individual link of time switch channels with the outputs
- Time controlled positioning of drives (LUXOR 408 S / 409 S) as well as transmission of dimming values (LUXOR 405) as percentage values
- Blocking times for suppression of brightness or twilight signals from sensor module (LUXOR 411)
- Astronomical blocking times for time shifts for moving shutters / awnings up and down
- Automatic changeover summer / winter time
- PIN code
- Installation in flush-mounted socket

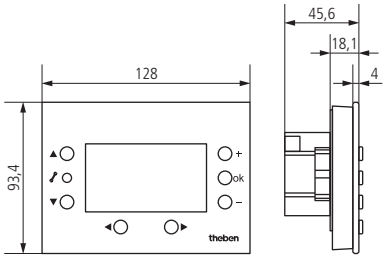
Product selection

Type	Article number
LUXOR 426	4260000

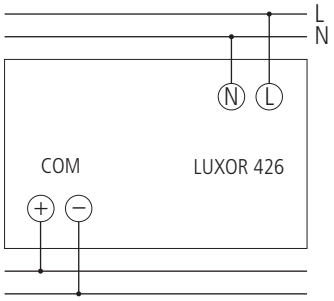
Technical data

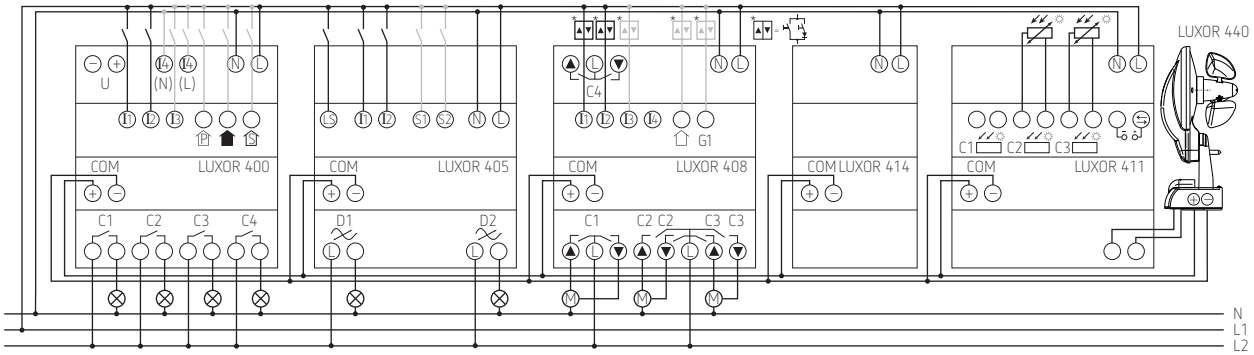
	LUXOR 426
Operating voltage	230 V AC
Frequency	50 Hz
Installation type	Wall installation or on flush-mounted socket
Stand-by consumption	1,1 W
Number of channels	8
Connection for COM	EIB / KNX bus line type YCYM or Y(ST)Y or communication line J-Y(ST)Y / length up to 100 m
Number of memory locations	350
Program	Weekly program
Ambient temperature	−5 °C ... +45 °C
Type of protection	IP 20
Protection class	II according to EN 60 335

Scale drawings



Connection diagrams






LUXOR 414

Description

- 8-channel time switch
- For control of any outputs in LUXOR system, e.g. shutters, blinds and awnings or for lighting control
- Manual switch on device
- Daily and weekly programs
- Astronomical program (dependent on sunrise and sunset)
- Freely programmable switching times as well as pre-programmed astronomical switching times
- Easy location input via city list
- Individual link of time switch channels with the outputs via selector switch
- Positioning of drives (LUXOR 408/LUXOR 409) as well as transmission of dimming values (LUXOR 405) as percentage values
- Blocking times for suppression of brightness or twilight signals from sensor module (LUXOR 411)
- Astronomical blocking times for time shifts for moving shutters/awnings up and down
- Automatic summer/winter time changeover
- LUXOR modules are connected via 2-wire bus cable (COM bus)

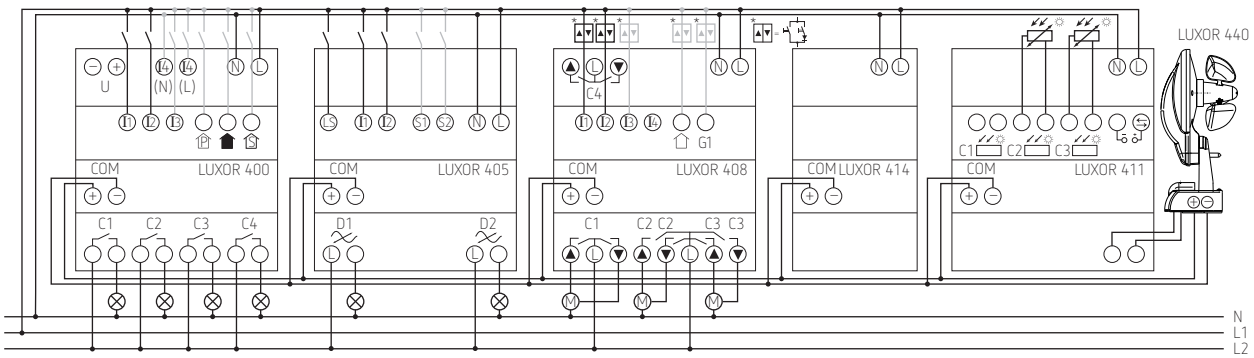
Product selection

Type	Article number
LUXOR 414	4140000

Technical data

	LUXOR 414
Operating voltage	230 V AC
Frequency	50 Hz
Width	2,5 modules
Installation type	DIN rail
Stand-by consumption	1,3 W
Number of channels	8
Connection for COM	EIB/KNX bus line type YCYM or Y(ST)Y or communication line J-Y(ST)Y/length up to 100 m
Number of memory locations	128
Ambient temperature	–10 °C ... +50 °C
Type of protection	IP 20
Protection class	II according to EN 60 730-1

Connection diagrams





LUXOR Set 4

LUXOR Set 5

Description

LUXOR Set 4

- Set for shutter and blind controlling
- 8 drives can be manually or automatically controlled according to time program or sunrise or sunset
- Blocking times for time shifts for moving shutters/awnings up and down in the early morning
- Additional comfortable central functions
- Suitable for shutter and blind 8 drives, 8 drives and 8 time channels with weekly program with astronomical function
- Consisting of: Box, 1 LUXOR 408 S, 1 LUXOR 409 S, 1 LUXOR 414

LUXOR Set 5

- Set for shutter and blind controlling
- 8 drives can be manually or automatically controlled according to time program or sunrise or sunset
- Blocking times for time shifts for moving shutters/awnings up and down in the early morning
- Additional comfortable central functions
- Suitable for shutter and blind 8 drives, 8 drives and 8 time channels with weekly program with astronomical function
- Consisting of: Box, 1 LUXOR 408 S, 1 LUXOR 409 S, 1 LUXOR 426

Product selection

Type	Article number
LUXOR Set 4	4990004
LUXOR Set 5	4990005



Meet people on an equal footing

Theben is present in more than 60 countries throughout the world. We are successfully active in numerous markets. It‘s not just our persuasive product portfolio that accounts for that. What is decisive is the attitude of people who meet one another on an equal footing and agree about challenges that must be overcome – by solutions that offer a concrete benefit. This openness to markets and people we call open-mindedness.

	Number of inputs	Number of outputs	Operating voltage	Type	Page
Controller					
	6	4	100 – 240 V AC	PHARAO-II 10 (AC)	274
			24 V DC	PHARAO-II 11 (DC)	274
	8	6	100 – 240 V AC	PHARAO-II 14 (AC)	274
			24 V DC	PHARAO-II 15 (DC)	274
	15	9	100 – 240 V AC	PHARAO-II 24 (AC)	274
			24 V DC	PHARAO-II 25 (DC)	274
	–	4	220 – 240 V AC	PHARAO-II extension 4AR (AC)	274
		–	24 V DC	LUNA 131 DDC	276
	1	1	100 – 240 V AC	SUD 228 II	276



PHARAO-II 10 (AC)



PHARAO-II 24 (AC)



PHARAO-II extension 4AR (AC)

Description

Common functions

- Small control unit for house automation and industry
- Programming directly on device via eight buttons without interface cable
- Display back light with operator guidance in clear text
- Input and output switching status display
- Lifespan of relay contacts is 100,000 switching cycles at nominal current
- Assignment of programmed functions on front keys
- Internal EEPROM memory for max. 200 function blocks (5,000 bytes)
- Optional plug-in EEPROM for program transfer or dual programming of internal and plugged-in EEPROM
- 3-level password protection
- Realtime year clock with 1,000 switching times
- Graphical programming software for Windows 95/98/NT/2000/ME/XP with detailed online Help documentation
- Remote control/remote monitoring possible via modem/GSM modem
- Transmission of SMS, email or fax

PHARAO-II 10 (AC)

- Small control unit for house automation and industry
- Operating voltage 100–240 V AC
- 6 digital inputs, e.g. for keys, brightness and temperature switches
- 4 relay outputs

PHARAO-II 11 (DC)

- Operating voltage 24 V DC
- 6 digital/analogue inputs
- 4 relay outputs

PHARAO-II 14 (AC)

- Operating voltage 100–240 V AC
- 8 digital inputs, e.g. for keys, brightness and temperature switches
- 6 relay outputs

PHARAO-II 15 (DC)

- Operating voltage 24 V DC
- 8 digital/analogue inputs
- 6 relay outputs

PHARAO-II 24 (AC)

- Operating voltage 100–240 V AC
- 15 digital inputs, e.g. for keys, brightness and temperature switches
- 9 relay outputs

PHARAO-II 25 (DC)

- Operating voltage 24 V DC
- 15 inputs, including 8 analogue/digital options
- 9 relay outputs

PHARAO-II extension 4AR (AC)

- 4 channel relay output extension
- For PHARAO-II 14 (AC), PHARAO-II 24 (AC)

Product selection

Number of inputs	Number of outputs	Operating voltage	Type	Article number
6	4	100–240 V AC	PHARAO-II 10 (AC)	5750210
		24 V DC	PHARAO-II 11 (DC)	5759211
8	6	100–240 V AC	PHARAO-II 14 (AC)	5750014
		24 V DC	PHARAO-II 15 (DC)	5759015
15	9	100–240 V AC	PHARAO-II 24 (AC)	5750024
		24 V DC	PHARAO-II 25 (DC)	5759025
–	4	220–240 V AC	PHARAO-II extension 4AR (AC)	5759102

Technical data

	PHARAO-II 10 (AC)	PHARAO-II 11 (DC)	PHARAO-II 14 (AC)	PHARAO-II 15 (DC)	PHARAO-II 24 (AC)	PHARAO-II 25 (DC)	PHARAO-II extension 4AR (AC)
Operating voltage	100–240 V AC	24 V DC	100–240 V AC	24 V DC	100–240 V AC	24 V DC	220–240 V AC
Frequency	50–60 Hz	–	50–60 Hz	–	50–60 Hz	–	50–60 Hz
Stand-by consumption	1,2 W	0,4 W	1,3 W	0,4 W	1,3 W	0,4 W	–
Width	4 modules		7 modules				–
Installation type	DIN rail						Encajable
Type of contact	NO contact						
Switching capacity	8 A (at 250 V AC, cos φ = 1), 373 VA (at 250 V AC, inductive load)				4 x 8 A (250 V AC, cos φ = 1), inductive load max. 373 VA, 5 x 2 A (250 V AC, cos φ = 1), inductive load max. 93 VA		2 A (at 250 V AC, cos φ = 1)
Power reserve	20 days						–
Time accuracy at 25 °C	≤ ± 5 s/day (quartz)						–
Input frequency	5 Hz	20 Hz					–
Ambient temperature	–25 °C ... +55 °C						–
Type of protection	IP 20						–
Protection class	II according to EN 60 730-1						–

Accessories



Power unit 24 V DC
↳ Art.No.: 9079330
Details page 289

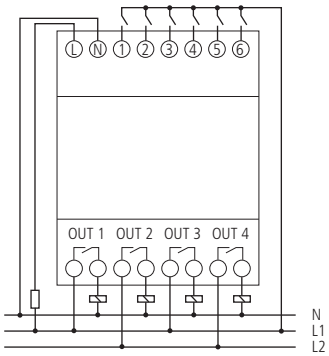


Memory module PHARAO-II
↳ Art.No.: 9070328
Details page 289

GSM cable PHARAO-II
Details page 288

Programming cable PHARAO
Details page 289

Connection diagrams



PHARAO-II 10 (AC)



LUNA 131 DDC

SUD 228 II

Description

LUNA 131 DDC

- Combination sensor with analogue output signal
- Can be used for brightness and temperature measurement
- Each of the two measurement outputs represents a 0–10 V analogue output signal
- The sensor can be connected directly to the analogue inputs of the PHARAO devices (24 V DC)
- Controls and regulators can be programmed with the signal converter, range compare and Schmitt trigger function modules
- External 24 V DC power unit required

SUD 228 II

- Charging switch for electric storage heaters
- Adjustable charging time and backward control
- If the ripple control receiver or the tariff time switch have been released for nighttime off-peak tariff, the device starts the charging program for storage heating
- Charging time can be set from 0–9 hours
- Onscreen display of charging time which is repeated every 24 hours
- Backward control stops charging process at the end of off-peak period
- Manual switch can be connected for daytime charging

Product selection

Type	Article number
LUNA 131 DDC	1319700
SUD 228 II	2280577

Technical data

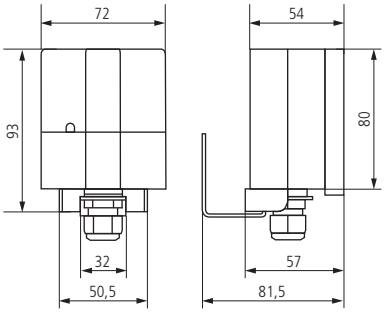
	LUNA 131 DDC	SUD 228 II
Operating voltage	24 V DC	100 – 240 V AC
Frequency	–	50 – 60 Hz
Stand-by consumption	–	1,2 W
Width	–	4 modules
Installation type	Surface-mounted	DIN rail
Type of contact	–	NO contact
Switching capacity	–	8 A (at 250 V AC, cos φ = 1)
Measuring range brightness	10 – 50000 lx	–
Measuring range temperature	– 30 °C ... +70 °C	–
Ambient temperature	– 30 °C ... +70 °C	0 °C ... +55 °C
Type of protection	IP 54	IP 20
Protection class	–	II according to EN 60 730-1

Accessories



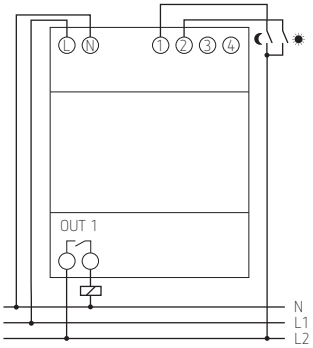
Power unit 24 V DC
↳ Art.No.: 9079330
Details page 289

Scale drawings



LUNA 131 DDC

Connection diagrams



SUD 228 II

Accessories

	Description	Suitable for	Type	Article number
	**Wall mounting kit 17,5 mm** - Terminal box cover plate for assembly, sealable	- All DIN rail installation devices - width 1 module	Wall mounting kit 17,5 mm	9070065
	**Wall mounting kit 35 mm** - Terminal box cover plate for assembly, sealable	- All DIN rail installation devices - width 2 modules	Wall mounting kit 35 mm	9070064
	**Wall mounting kit 52,5 mm** - Terminal box cover plate for assembly, sealable	- All DIN rail installation devices - width 3 modules	Wall mounting kit 52,5 mm	9070050
	**Wall mounting kit 70 mm** - Terminal box cover plate for assembly, sealable	- All DIN rail installation devices - width 4 modules	Wall mounting kit 70 mm	9070049
	**Terminal cover 52,5 mm** - Terminal box cover plate for assembly, sealable	- SUL 188 g - SUL 188 hw	Terminal cover 52,5 mm	9070061
	**Front panel kit** - The front panel installation set is suitable for Theben distributor installation devices of 17.5 to 107.5 mm width - Walls from 1 to 5 mm thick	- All DIN rail installation devices	Front panel kit	9070001
	**Snap-on mounting 72 x 72** - Quick fastening for 35 mm DIN-rail	- All devices for front panel/wall installation	Snap-on mounting 72 x 72	9070071
	**Multiple contact strip** - Multiple contact strip for soldering to PCBs	- TR 684 top2	Multiple contact strip	9075141
	**Light sensor theRolla** - Light sensor for time switch	- theRolla P032	Light sensor theRolla	9070926

15

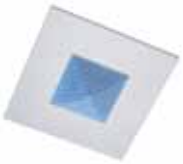
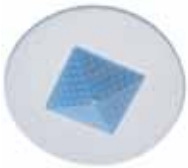
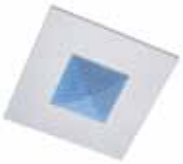
	Description	Suitable for	Type	Article number
	**PC set OBELISK top2** - Switching programs created on the PC by means of the convenient OBELISK top2 software can be transferred via USB interface to the OBELISK top2 memory card and from the card to the time switch and vice versa. Thus no PC or laptop is required on-site. Programming and the program printout can be done comfortably from the desk - For Windows XP/Vista/7/8 (32/64 Bit) - Consisting of: Memory card, USB plug adapter, software - Updates of existing OBELISK top2 software are available as free downloads at www.theben.de	- TR top2 - LUNA top2 - SELEKTA top2 - TR top2 KNX	PC set OBELISK top2	9070409
	**Memory card OBELISK top2** - Individual memory card	- TR top2 - LUNA top2 - SELEKTA top2 - TR top2 KNX	Memory card OBELISK top2	9070404
	**Antenna DCF77 KNX** - Radio control via antenna with KNX time switches: To ensure good reception, do not install the antenna in cellars or on distribution boxes. Connection is made via separate 2-wire, unscreened high-voltage power cable (max. 100 m), up to 10 Theben top2 RC devices can be connected. Polarity, short-circuit and interruption of the antenna circuit are each visually displayed to help with installation.	- ZS 600 DCF KNX	Antenna DCF77 KNX	9070271
	**Antenna top2 RC-DCF** - Radio control via antenna with top2 RC devices: To ensure good reception, do not install the antenna in cellars or on distribution boxes. Connection is made via separate 2-wire, unscreened high-voltage power cable (max. 100 m), up to 10 Theben top2 RC devices can be connected. Polarity, short-circuit and interruption of the antenna circuit are each visually displayed to help with installation.	- TR top2 RC - LUNA top2 RC - SELEKTA top2 RC - TR top2 KNX	Antenna top2 RC-DCF	9070410
	**Antenna top2 RC-GPS** - Worldwide time synchronisation and positioning via receiving GPS satellite signal - The antenna is connected by a 2 wire cable (max. 100 m) to Theben top2 RC devices (up to 5 devices can be connected depending on device type) - A top2 GPS power unit (item number 907 0 892) is also required when connecting to TR 611 top2 RC, LUNA 121 top2 RC, LUNA 122 top2 RC or SELEKTA 171 top2 RC devices - No additional power un it is required when connecting to TR 641 top2 RC, TR 642 top2 RC, TR 644 top2 RC devices or several devices to one antenna - Positioning is only possible when connecting to TR 641 top2 RC, TR 642 top2 RC, TR 644 top2 RC and SELEKTA 171 top2 RC devices - Can not be used with TR 611 top2 RC 24 V and SELEKTA 171 top2 RC 24V	- TR top2 RC - LUNA top2 RC - SELEKTA top2 RC - TR top2 KNX	Antenna top2 RC-GPS	9070610
	**Power unit top2 GPS** - Required when connecting the antenna top2 RC-GPS to an individual TR 611 top2 RC, LUNA 121 top2 RC, LUNA 122 top2 RC or SELEKTA 171 top2 RC device (No additional power unit is required when connecting to a minimum of 2 devices) - Operating voltage: 230 V AC - Width: 2 modules	- TR top2 RC - LUNA top2 RC - SELEKTA top2 RC	Power unit top2 GPS	9070892

Accessories

	Description	Suitable for	Type	Article number
	**Cover 55 x 55 for BZ** - Cover for hour counter	- BZ 142-1	Cover 55 x 55 for BZ	9070041
	**Cover 72 x 72 for BZ** - Cover for hour counter	- BZ 142-1	Cover 72 x 72 for BZ	9070074
	**Front kit BZ 142-3** - Terminal box cover plate for hour counter	- BZ 142-3	Front kit BZ 142-3	9070075
	**Clamp BZ** - Clamping bracket for hour counter	- BZ 142-1 - BZ 143-1 - BZ 146 - BZ 147	Clamp BZ	9070043
	**Plug-in socket BZ** - Plug-in base for hour counter	- BZ 142-3	Plug-in socket BZ	9070042
	**Surface frame PresenceLight** - Presence detector surface frame - Colour: Pure white - Additional colours available upon request	- PresenceLight 180 - PresenceLight 360	Surface frame PresenceLight	9070513
	**Surface frame compact** - Presence detector surface frame - Colour: Pure white - Additional colours available upon request	- compact office - compact passage - compact passimo	Surface frame compact	9070514
	**Surface frame 110A WH** - Presence detector surface frame - Colour: white - Additional colours available upon request	- thePrema - theRonda P - theMova P	Surface frame 110A WH	9070912
	**Surface frame 110B WH** - Presence detector surface frame - Colour: white - Additional colours available upon request	- thePrema KNX	Surface frame 110B WH	9070918

	Description	Suitable for	Type	Article number
	**Ceiling installation box 73A** - Ceiling installation unit for thePrema, ensures strain relief and contact protection at the same time. The installation diameter is 72 mm (drill diameter 73 mm)	- thePrema - theRonda P - theMova P	Ceiling installation box 73A	9070917
	Masking clip - For limiting the detection area	- theRonda P - theMova P	Masking clip	9070921
	**Surface frame 75 A WH** - Presence detector surface frame - Colour: Pure white - Additional colours available upon request	- PlanoSpot	Surface frame 75A WH	9070949
	**PlanoSet RQ EWH** - Mounting set consisting of round flush-mounting box PlanoFix E, white matching square cover PlanoCover and assembly parts - Additional colours available upon request - Easy and fast mounting in false-ceilings - Cut-out can be easily realized with a standard drill bit diameter 127 mm (5 inches) - The following installation and alignment of the presence detector PlanoCentro is implemented very easily and quickly - Frame PlanoCover: 142 x 142 mm	- PlanoCentro E	PlanoSet RQ EWH	9070736
	**PlanoSet RR EWH** As PlanoSet RQ EWH, but: - Round cover PlanoCover - Frame PlanoCover: Ø 172 mm	- PlanoCentro E	PlanoSet RR EWH	907040
	**PlanoBox 1WH** - Presence detector surface frame - Colour: Pure white - Additional colours available upon request - Dimensions: 100 x 123 x 123 mm	- PlanoCentro U	PlanoBox 1WH	9070731
	**Junction casing, 115x115x100 mm** - Agro/Kaiser flush-mounted junction box/connection box 9908.01	- PlanoCentro U	Junction casing, 115 x 115 x 100 mm	9070689
	**Surface frame ECO-IR 360** - Presence detector surface frame - Colour: Pure white - Additional colours available upon request	- ECO-IR DUAL-C NT - ECO-IR 360-24V - ECO-IR DUAL-EIB	Surface frame ECO-IR 360	9070512

Accessories

	Description	Suitable for	Type	Article number
	**Surface frame ECO-IR 180** - Presence detector surface frame - Colour: Pure white - Additional colours available upon request	- ECO-IR 180A - ECO-IR 180-24V	Surface frame ECO-IR 180	9070511
	**QuickFix concrete round cover** - QuickFix concrete, flush-mounted socket for concrete - Flush ceiling installation - The presence detector is inserted into the false ceiling using a flush-mounted socket, just leaving pyramid lense visible - Colour: Pure white - Additional colours available upon request	- ECO-IR DUAL-C NT - ECO-IR 360-24V - ECO-IR DUAL-EIB	QuickFix concrete round cover	9070519
	**QuickFix concrete square cover** - QuickFix concrete, flush-mounted socket for concrete - Flush ceiling installation - The presence detector is inserted into the false ceiling using a flush-mounted socket, just leaving pyramid lense visible - Colour: Pure white - Additional colours available upon request	- ECO-IR DUAL-C NT - ECO-IR 360-24V - ECO-IR DUAL-EIB	QuickFix concrete square cover	9070518
	**QuickFix concrete flush-mounted box** - QuickFix flush-mounted socket concrete	- ECO-IR DUAL-C NT - ECO-IR 360-24V - ECO-IR DUAL-EIB	QuickFix concrete flush-mounted box	9070521
	**QuickFix round cover** - QuickFix housing, for false ceilings - Flush ceiling installation - The presence detector is inserted into the false ceiling, just leaving pyramid lense visible - Easy installation - Colour: Pure white - Additional colours available upon request	- ECO-IR DUAL-C NT - ECO-IR 360-24V - ECO-IR DUAL-EIB	QuickFix round cover	9070517
	**QuickFix square cover** - QuickFix housing, for false ceilings - Flush ceiling installation - The presence detector is inserted into the false ceiling, just leaving pyramid lense visible - Easy installation - Colour: Pure white - Additional colours available upon request	- ECO-IR DUAL-C NT - ECO-IR 360-24V - ECO-IR DUAL-EIB	QuickFix square cover	9070516
	**QuickFix flush-mounted housing** - QuickFix flush-mounted housing - Incl. flush-mounted socket	- ECO-IR DUAL-C NT - ECO-IR 360-24V - ECO-IR DUAL-EIB	QuickFix flush-mounted housing	9070522
	**QuickSafe** - QuickSafe safety cover - Secure protection against mechanical damage - Robust and solid design - Particularly impact resistant - 6 screws, 3 rawlplugs and three spacers - Protection class IK07	- All ThebenHTS presence detectors	QuickSafe	9070531

	Description	Suitable for	Type	Article number
	**SendoPro 868-A** - Infrared remote control for the convenient startup of HTS presence detectors - The SendoPro 868A management remote control for the electrician enables efficient start-up and flexible adaptation to new applications - Rapid adjustment of parameters to changed operating conditions without uninstalling detectors - Transmission of individual settings or complete configuration sets to the detector - Select configurations from PlanoCentro - Calling up of pre-defi ned value packets for typical rooms - Saving and calling up user-defined parameter sets on internal memory or SD card - Updates via SD card	- PresenceLight - compact office - compact passage - compact passimo - thePrema - ECO-IR DUAL-C NT - PlanoCentro - PlanoSpot	SendoPro 868-A	9070675
	**clic** - Infrared remote control for ThebenHTS presence sensors - Switching and dimming of lighting, scene control - 2 channels for 2 lighting groups - 2 programmable scenes - 5 group addresses for defining channels - Coding switch and programming key for the easy allocation of lighting groups and channels	- PresenceLight 180/360 - compact office DIM - compact office 24V - compact office 24V Lux - compact passage 24V - compact passage - compact passimo - ECO-IR DUAL-C NT - compact passage KNX - compact passimo KNX	clic	9070515
	**RC filter** - Suppression filter for presence and motion detectors	- All presence and motion detectors	RC filter	9070523
	**Spacer theLuxa S BK** - Additional spacer for flexible installation (cable entry below, side, top and more space for cables)	- theLuxa S150 - the LuxaS180 - theLuxa S360	Spacer theLuxa S BK	9070907
	**Spacer theLuxa S WH** - Additional spacer for flexible installation (cable entry below, side, top and more space for cables)	- theLuxa S150 - the LuxaS180 - theLuxa S360	Spacer theLuxa S WH	9070906
	**Spacer theLuxa P BK** - Additional spacer for flexible installation (cable entry below, side, top and more space for cables)	- theLuxa P220 - theLuxa P300 - theLuxa P300 KNX	Spacer theLuxa P BK	9070909
	**Spacer theLuxa P WH** - Additional spacer for flexible installation (cable entry below, side, top and more space for cables)	- theLuxa P220 - theLuxa P300 - theLuxa P300 KNX	Spacer theLuxa P WH	9070908

Accessories

	Description	Suitable for	Type	Article number
	**Corner angle theLuxa S BK** - For corner installation of motion detectors - Wall installation, external corner installation	- theLuxa S150 - theLuxa S180 - theLuxa S360	Corner angle theLuxa S BK	9070903
	**Corner angle theLuxa S WH** - For corner installation of motion detectors - Wall installation, external corner installation	- theLuxa S150 - theLuxa S180 - theLuxa S360	Corner angle theLuxa S WH	9070902
	**Corner angle theLuxa P BK** - For corner installation of motion detectors - Wall installation, external corner installation	- theLuxa P220 - theLuxa P300 - theLuxa P300 KNX	Corner angle theLuxa P BK	9070905
	**Corner angle theLuxa P WH** - For corner installation of motion detectors - Wall installation, external corner installation	- theLuxa P220 - theLuxa P300 - theLuxa P300 KNX	Corner angle theLuxa P WH	9070904
	**LUXA LED Corner angle BK** - For corner installation of the LED spotlight - Wall installation, external corner installation	- LUXA LED 8W - LUXA LED 16W	LUXA LED Corner angle BK	9070757
	**LUXA LED Corner angle WH** - For corner installation of the LED spotlight - Wall installation, external corner installation	- LUXA LED 8W - LUXA LED 16W	LUXA LED Corner angle BK	9070756
	**Surface frame LUXA 103-200** - Motion detector surface frame	- LUXA 103-200	Surface frame LUXA 103-200	9070504
	**SPHINX RC 104** - User remote control for SPHINX 104 - ON/OFF (max. 8 h)/Automatic - Teach-in function for teaching in the current brightness value	- SPHINX 104-360 - SPHINX 104-360/2 - SPHINX 104-360 AP - SPHINX 104-360/2 AP	SPHINX RC 104	9070538
	**SPHINX RC 104 Pro** - Service remote control for SPHINX 104 - ON/OFF - Teach-in function for teaching in the current brightness value - Predefined brightness values and switch-on times - Impulse, reset and test function - Block function	- SPHINX 104-360 - SPHINX 104-360/2 - SPHINX 104-360 AP - SPHINX 104-360/2 AP	SPHINX RC 104 Pro	9070536

	Description	Suitable for	Type	Article number
	**theSenda P** - Service remote control - ON/OFF - Teach-in function for teaching in the current brightness value - Predefined brightness values and switch-on times - Impulse, reset and test function - etc.	- PlanoCentro - PlanoCentro KNX - PresenceLight KNX - compact office DALI - thePrema - theMova - theRonda - theLuxa P - PlanoSpot	theSenda P	9070910
	**theSenda S** - User remote control - ON/OFF - Automatic - Presence simulation - Twilight switch - Call up of light scenes	- PlanoCentro - PlanoCentro KNX - PresenceLight KNX - compact office DALI - thePrema - theMova - theRonda - theLuxa P - PlanoSpot	theSenda S	9070911
	**Adapter plate LUNA star** - The adapter plate simplifies the replacement of faulty twilight switches from Eberle, ESYLUX, Legrand, Grässlin, Hager, Merten, Senmatic, Theben etc. As the plate has standard fixing holes, no further holes need to be drilled in the facade, 2 installation screws included.	- LUNA 126 star - LUNA 127 star - LUNA 128 star - LUNA 129 star-time	Adapter plate LUNA star	9070486
	**Analogue flush-mounted light sensor** - Connecting cable 1.5 m - Protection class IP 65	- LUNA 108 - LUNA 109 - LUNA 110 - LUNA 120 top2	Analogue flush-mounted light sensor	9070011
	**Analogue surface-mounted light sensor** - Sensor rotatable - With mounting bracket and screw terminals - Protection class IP 55 - Dimensions: 95 x 48 x 45 mm	- LUNA 109 - LUNA 110 - LUNA 120 top2	Analogue surface-mounted light sensor	9070416
	**Digital flush-mounted light sensor** - Spring terminals - Protection class IP 66	- LUNA 111 top2 - LUNA 112 top2 - LUNA 121 top2 RC - LUNA 122 top2 RC - LUNA 134 KNX	Digital flush-mounted light sensor	9070456
	**Digital surface-mounted light sensor** - Sensor rotatable - With mounting bracket and screw terminals - Protection class IP 55 - Dimensions: 95 x 48 x 45 mm	- LUNA 111 top2 - LUNA 112 top2 - LUNA 121 top2 RC - LUNA 122 top2 RC - LUNA 134 KNX	Digital surface-mounted light sensor	9070415
	**Surface-mounted light sensor** - Sensor rotatable - With mounting bracket and Screw terminals - Protection class IP 54 - Dimensions: 116 x 27 x 61 mm	- LUNA 108 - LUXOR 411	Surface-mounted light sensor	9070008

Accessories

	Description	Suitable for	Type	Article number
	**Diode module** - Required for special functions (group/central function) with LUXOR - DIMAX: Light scenes, two button operation - 2 modules supplied in delivery	- LUXOR 400 - LUXOR 402 - LUXOR 404 - LUXOR 405 - LUXOR 408 S - LUXOR 409 S - DIMAX 534 plus	Diode module	9070367
	**Adapter RAMSES 72x/78x** - Wallpaper/wall cover plate for replacement of RAMSES 3...devices with new clock thermostats, e.g. RAMSES 722	- RAMSES 722 - RAMSES 722 S - RAMSES 782 - RAMSES 782 S - RAMSES 784 - RAMSES 784 S - RAMSES 721 - RAMSES 725	Adapter RAMSES 72x/78x	9070245
	**Socket RAMSES** - Plug-in socket for installing the RAMSES HF clock thermostat on the wall	- RAMSES 813 top2 Set A/Set S/Set 1 - RAMSES 833 top2 Set 1/2	Socket RAMSES	9070605
	**Adapter plate RAMSES 70x** - Adapter plate for flush-mounted socket 79 x 79 mm	- RAMSES 701-709	Adapter plate RAMSES 70x	9070480
	**Adapter plate RAMSES 714** - Adapter plate for flush-mounted socket 79 x 79 mm	- SOTHIS 715 - RAMSES 714 - RAMSES 714 A - RAMSES 714 A/FH	Adapter plate RAMSES 714	9070212
	**External temperature sensor 1** - External temperature sensor	- RAMSES 366/1 top2 - RAMSES 713 S KNX - RAMSES 713 FC KNX - CHEOPS control KNX	External temperature sensor 1	9070191
	**External temperature sensor 2** - With temperature adjustment of ± 3 K	- RAMSES 366/1 top2	External temperature sensor 2	9070192
	Temperature sensor RAMSES IP 65 - External room temperature sensor - Protection class IP 65	- RAMSES 831 top2 - RAMSES 832 top2,RAMSES 833 top2 - RAMSES 833 top2 Sets - RAMSES 816 top2 OT - RAMSES 856 top2 OT	Temperature sensor RAMSES IP 65	9070459

	Description	Suitable for	Type	Article number
	**Temperature sensor** - Temperature sensor for laying in floor - Type of protection IP 65	- RAMSES 831 top2 - RAMSES 832 top2 - RAMSES 833 top2 Sets - RAMSES 712 KNX - FCA 1 KNX	Temperature sensor	9070321
	**OT-Box Standard** - For expansion of the RAMSES 856 top2 OT system	- RAMSES 856 top2 OT	OT-Box Standard	9070712
	**Flow temperature sensor RAMSES** - Also required for applications with 2 feed sensors	- RAMSES 816 top2 OT - RAMSES 856 top2 OT	Flow temperature sensor RAMSES	9070371
	**Outside temperature sensor RAMSES** - Type of protection IP 65	- RAMSES 816 top2 OT	Outside temperature sensor	9070463
	**Plunge sensor RAMSES** - Additionally required for applications with domestic water control or boiler plunge sensor	- RAMSES 816 top2 OT - RAMSES 856 top2 OT	Plunge sensor RAMSES	9070379
	**Actuator ALPHA 5 230 V** - Actuator for radiators, heating circuit distributors or individual heating circuits - Operating voltage 230 V AC - For opening and closing of valves in the fields of heating, ventilation and air conditioning - The actuator control is by a room thermostat with two-point output or pulse-width-modulation - Inrush current max. 250 mA for max. 2 min., Operating current 75 mA - „First open function" for easy installation and heating start-up - Plug-in installation on valve adapter to suit the most common valve bottoms and heating circuit distributors - Normally closed (Valve is closed when the operating voltage is cut) - Simple snap-on mounting to a valve adapter - Valve adapter not included in delivery - 100 % protection against damaging drives through leaking valves - Function and adjustment checking - Installation vertical, horizontal and up-side-down possible - Up-side-down position may reduce product life through special circumstances (e.g. contaminated water) - Protection against disassembly by means of removable SaveGuard - Guaranteed overvoltage protection	- All clock thermostats - RAMSES 701 – 709 - RAMSES 741 – 748 - RAMSES 714 - RAMSES 751 - HMG 6 T - HME 6 T KNX - HM 6 T KNX - HM 12 T KNX	Actuator ALPHA 5 230 V	9070441

Accessories

	Description	Suitable for	Type	Article number
	**Actuator ALPHA 5 24 V** As Actuator ALPHA 5 230 V, but: - Operating voltage 24 V AC/DC	- All clock thermostats - HMG 6 T - HME 6 T KNX - HM 6 T KNX - HM 12 T KNX - HMT 6/HMT 12 KNX	Actuator ALPHA 5 24 V	9070442
	**Valve adapter VA 80** - Valve adapters for Onda, Schlösser(from 1993), Oventrop (M 30 x 1.5), Heimeier, Herb, Therm-Concept, Frank, Roth (distributor), Dinotherm (distributor) - Other adapters available upon request	- ALPHA 5 230 V - ALPHA 5 24 V - CHEOPS control KNX - CHEOPS drive KNX	Valve adapter VA 80	9070437
	**Valve adapter VA 78** - Valve adapters for Danfoss RA - Other adapters available upon request	- ALPHA 5 230 V - ALPHA 5 24 V - CHEOPS control KNX - CHEOPS drive KNX	Valve adapter VA 78	9070436
	**Frame RAMSES 74x** - Frame for mechanical room thermostats - Without central part	- RAMSES 741 - RAMSES 746 - RAMSES 748	Frame RAMSES 74x	9070603
	**Central part RAMSES 741/748** - Central part without switch section and setting button	- RAMSES 741 - RAMSES 748	Central part RAMSES 741/748	9070602
	**Central part RAMSES 746** - Central part with switch section and setting button	- RAMSES 746	Central part RAMSES 746	9070601
	**Power unit CO_2-sensor** - 24 V/12 W flush-mounted power unit (SELV)	- AMUN 716 R	Power unit CO_2-sensor	9070494
	**Mast mounting S** - For mast or corner installation of max. 2 weather stations Meteodata, LUXOR or LUNA - Diameter 48–60 mm	- LUXOR 440 - Meteodata KNX	Mast mounting S	9070928
	**GSM cable PHARAO-II** - PHARAO-II GSM interface cable - Enables connection to be established and SMS data to be transmitted to mobile telephone, email address or fax machine. The interface for connecting the GSM cable is located below the plug-in upgrade modules.	- PHARAO-II	GSM cable PHARAO-II	9070329

	Description	Suitable for	Type	Article number
	**Memory module PHARAO-II** - Plug-in EEPROM memory module (5 kByte) - External memory module for transferring and/or downloading the program from or to the internal EEPROM system memory. Internal program is deactivated for as long as the external memory module is plugged in (dual programming).	- PHARAO-II	Memory module PHARAO-II	9070328
	**Power unit 24 V DC** - Power pack for supply voltage from PHARAO controllers and sensors. Power unit sufficient for 5 x PhARAO-II 14/15 or 4 x PHARAO-II 24/25 controls - Width: 3 modules	- LUNA 131 DDC - PHARAO-II	Power unit 24 V DC	9079330
	**Programming cable PHARAO** - For series connection (RS 232) to enable conrol programs to be configured and parameterised. This cable is used to connect an analogue model for remote maintenance and remote control.	- PHARAO-II	Programming cable PHARAO	9070252

Index 2016
Alphabetical A ... F

Type	Art.-No.	EAN / GTIN	Page
A			
Actuator ALPHA 5 230 V	9070441	4003468901038	287
Actuator ALPHA 5 24 V	9070442	4003468901052	288
Adapter plate LUNA star	9070486	4003468907559	285
Adapter plate RAMSES 70x	9070480	4003468904299	286
Adapter plate RAMSES 714	9070212	4003468900796	286
Adapter RAMSES 72x / 78x	9070245	4003468902059	286
AMUN 716 KNX	7169200	4003468716205	219
AMUN 716 R	7160101	4003468716250	188
Analogue flush-mounted light sensor	9070011	4003468900604	285
Analogue surface-mountedlight sensor	9070416	4003468904275	285
Antenna DCF77 KNX	9070271	4003468903056	279
Antenna top2 RC-DCF	9070410	4003468904077	279
Antenna top2 RC-GPS	9070610	4003468903254	279
B			
BM 12 T KNX	4940235	4003468490723	208
BM 6 T KNX	4940230	4003468490716	208
BME 6 T KNX	4930235	4003468490242	208
BMG 6 T KNX	4930230	4003468490204	208
BZ 142-1	1420721	4003468140017	60
BZ 142-1 10V	1420821	4003468140420	60
BZ 142-1 230V	1420621	4003468140086	60
BZ 142-1 24V	1424721	4003468140932	60
BZ 142-3	1420723	4003468140024	60
BZ 142-3 10V	1420823	4003468140369	60
BZ 143-1	1430721	4003468140130	60
BZ 145	1450000	4003468140918	60
BZ 145 24V	1459024	4003468141021	60
BZ 146	1460000	4003468146002	62
BZ 147	1470000	4003468147009	62
BZ 148	1480000	4003468148006	62
C			
Ceiling installation box 73A	9070917	7612748004979	281
Central part RAMSES 741 / 748	9070602	4003468904589	288
Central part RAMSES 746	9070601	4003468904572	288
CHEOPS control KNX	7329201	4003468732014	218
CHEOPS drive KNX	7319200	4003468731000	218
Clamp BZ	9070043	4003468900703	280
clic	9070515	7612748000919	283
compact office 24V	2014000	7612748001039	118
compact office 24V BK	2014800	7612748002777	118
compact office 24V Lux	2014001	7612748001121	120
compact office 24V Lux BK	2014803	7612748002807	120
compact office 24V Lux SR	2014804	7612748002814	120
compact office 24V SR	2014801	7612748002784	118
compact office DALI BK	2010011	7612748004061	96
compact office DALI SR	2010012	7612748004078	96
compact office DALI WH	2010010	7612748004054	96
compact office DIM	2010001	7612748000773	94
compact office DIM BK	2010803	7612748002715	94
compact office DIM SR	2010804	7612748002722	94
compact passage	2010090	7612748001626	98
compact passage 24V	2014090	7612748001725	122
compact passage 24V BK	2014806	7612748002838	122
compact passage 24V SR	2014807	7612748002845	122
compact passage BK	2010806	7612748002746	98
compact passage KNX	2019290	7612748001732	224
compact passage KNX BK	2019803	7612748002890	224
compact passage KNX SR	2019804	7612748002906	224
compact passage SR	2010807	7612748002753	98
compact passimo 24V BK	2014811	7612748004160	124
compact passimo 24V SR	2014812	7612748004177	124
compact passimo 24V WH	2014810	7612748004153	124
compact passimo BK	2010809	7612748003361	100
compact passimo KNX BK	2019809	7612748003446	224
compact passimo KNX SR	2019810	7612748003453	224
compact passimo KNX WH	2019280	7612748003439	224
compact passimo SR	2010810	7612748003378	100
compact passimo WH	2010080	7612748003354	100
Corner angle theLuxa P BK	9070905	4003468900314	284
Corner angle theLuxa P WH	9070904	4003468900291	284
Corner angle theLuxa S BK	9070903	4003468900284	284
Corner angle theLuxa S WH	9070902	4003468900277	284
Cover 55 x 55 for BZ	9070041	4003468902004	280
Cover 72 x 72 for BZ	9070074	4003468900925	280
D			
DALI Gateway KNX	9070722	4003468900048	252
Digital flush-mounted light sensor	9070456	4003468904343	285
Digital surface-mounted light sensor	9070415	4003468904268	285
DIMAX 532 plus	5320001	4003468530016	72
DIMAX 534 plus	5340001	4003468530009	72
Diode module	9070367	4003468903605	286
DM 2 T KNX	4940270	4003468490808	204
DM 4 T KNX	4940275	4003468490808	204
DMB 1 T KNX	4930279	4003468490020	204
DMB 2 S	4910272	4003468491720	264
DME 2 T KNX	4930275	4003468490013	204
DMG 2 T KNX	4930270	4003468490006	204
E			
ECO-IR 180-24V	2024050	7612748000537	128
ECO-IR 180-24V BK	2024803	7612748002234	128
ECO-IR 180-24V SR	2024804	7612748002241	128
ECO-IR 180A	2020050	7612748000476	116
ECO-IR 180A BK	2020809	7612748002111	116
ECO-IR 180A SR	2020810	7612748002128	116
ECO-IR 360-24V	2024000	7612748000544	126
ECO-IR 360-24V BK	2024800	7612748002203	126
ECO-IR 360-24V SR	2024801	7612748002210	126
ECO-IR DUAL-C NT	2020401	7612748000872	106
ECO-IR DUAL-C NT BK	2020815	7612748002173	106
ECO-IR DUAL-C NT SR	2020816	7612748002180	106
ELPA 041	0410002	4003468041000	70
ELPA 047	0470002	4003468047002	70
ELPA 1	0010002	4003468010518	66
ELPA 3	0030002	4003468010501	66
ELPA 6	0060002	4003468010525	66
ELPA 6 plus	0060003	4003468000052	66
ELPA 7	0070002	4003468007006	66
ELPA 8	0080002	4003468010068	68
ELPA 9	0090001	4003468010129	68
EM 4 top2	6490104	4003468649008	26
EM LAN top2	6490900	4003468649015	26
External temperature sensor 1	9070191	4003468901915	286
External temperature sensor 2	9070192	4003468901922	286
F			
FCA 1 KNX	4920200	4003468492000	221
Flow temperature sensor RAMSES	9070371	4003468903629	287
Frame RAMSES 74x	9070603	4003468904596	288

Type	Art.-No.	EAN / GTIN	Page
FRI 77 g	0770033	4003468070024	54
FRI 77 g-2	0770832	4003468070086	54
FRI 77 h-2	0770802	4003468070048	54
Front kit BZ 142-3	9070075	4003468900932	280
Front panel kit	9070001	4003468900109	278
G			
GSM cable PHARAO-II	9070329	4003468903483	288
H			
HM 12 T KNX	4940245	4003468490761	214
HM 6 T KNX	4940240	4003468490754	214
HME 6 T KNX	4930245	4003468490198	214
HMG 6 T KNX	4930240	4003468490129	214
HMT 12 KNX	4900274	4003468490549	216
HMT 6 KNX	4900273	4003468490532	216
I			
Interface USB KNX	9070397	4003468903995	255
J			
JM 4 T 24V KNX	4940260	4003468490877	202
JM 4 T KNX	4940250	4003468490778	200
JM 8 T 24V KNX	4940265	4003468490884	202
JM 8 T KNX	4940255	4003468490785	200
JME 4 T 24V KNX	4930265	4003468490860	202
JME 4 T KNX	4930255	4003468490075	200
JMG 4 T 24V KNX	4930260	4003468490853	202
JMG 4 T KNX	4930250	4003468490051	200
Junction casing, 115 x 115 x 100 mm	9070689	7612748002661	281
K			
KNX-OT-Box S	8559201	4003468850220	253
L			
Light sensor theRolla	9070926	4003468901021	278
Line coupler S KNX	9070880	4003468900253	255
LUNA 108 AL	1080710	4003468108017	76
LUNA 108 EL	1080700	4003468108000	76
LUNA 109 AL	1090100	4003468109007	76
LUNA 109 EL	1090200	4003468109014	76
LUNA 110 AL	1100100	4003468111109	76
LUNA 110 AL 24V	1104100	4003468111161	76
LUNA 110 EL	1100200	4003468111154	76
LUNA 110 EL 24V	1104200	4003468111222	76
LUNA 111 top2 AL	1110100	4003468111147	78
LUNA 111 top2 EL	1110200	4003468111116	78
LUNA 112 top2 AL	1120100	4003468112007	78
LUNA 112 top2 EL	1120200	4003468112014	78
LUNA 120 top2 AL	1200100	4003468120002	80
LUNA 120 top2 EL	1200200	4003468120019	80
LUNA 121 top2 RC AL	1210100	4003468121009	80
LUNA 121 top2 RC AL 24V	1214100	4003468121054	80
LUNA 121 top2 RC EL	1210200	4003468121016	80
LUNA 122 top2 RC AL	1220100	4003468122006	80
LUNA 122 top2 RC EL	1220200	4003468122013	80
LUNA 126 star	1260701	4003468126035	82
LUNA 127 star	1270700	4003468127001	82
LUNA 128 star	1280700	4003468128008	82
LUNA 129 star-time	1290700	4003468129005	82
LUNA 131 DDC	1319700	4003468131022	276
LUNA 131 S KNX	1319201	4003468131039	246
LUNA 133 KNX	1339200	4003468133002	147
LUNA 134 KNX	1349200	4003468130032	245
LUXA 102 FL LED 16W BK	1020774	4003468100189	146
LUXA 102 FL LED 16W W BK	1020754	4003468100578	146
LUXA 102 FL LED 16W W WH	1020753	4003468100561	146
LUXA 102 FL LED 16W WH	1020773	4003468100172	146
LUXA 102 FL LED 32W BK	1020776	4003468100202	146
LUXA 102 FL LED 32W WH	1020775	4003468100196	146
LUXA 102 FL LED 8W BK	1020772	4003468100165	146
LUXA 102 FL LED 8W W BK	1020752	4003468100554	146
LUXA 102 FL LED 8W W WH	1020751	4003468100547	146
LUXA 102 FL LED 8W WH	1020771	4003468100141	146
LUXA 102-140 LED 16W BK	1020974	4003468100066	142
LUXA 102-140 LED 16W W BK	1020954	4003468100615	142
LUXA 102-140 LED 16W W WH	1020953	4003468100608	142
LUXA 102-140 LED 16W WH	1020973	4003468100059	142
LUXA 102-140 LED 8W BK	1020972	4003468100035	142
LUXA 102-140 LED 8W W BK	1020952	4003468100592	142
LUXA 102-140 LED 8W W WH	1020951	4003468100585	142
LUXA 102-140 LED 8W WH	1020971	4003468100028	142
LUXA 102-150 / 150 W black	1020962	4003468102015	148
LUXA 102-150 / 150 W white	1020961	4003468102008	148
LUXA 102-150 / 500 W black	1020964	4003468102039	148
LUXA 102-150 / 500 W white	1020963	4003468102022	148
LUXA 102-180 LED 32W BK	1020976	4003468100097	144
LUXA 102-180 LED 32W WH	1020975	4003468100080	144
LUXA 103-200	1030030	4003468103043	156
LUXA 103-200 T	1030031	4003468103050	156
LUXA LED Corner angle BK	9070756	4003468900758	284
LUXA LED Corner angle BK	9070757	4003468900772	284
LUXOR 400	4000000	4003468400005	262
LUXOR 402	4020000	4003468402009	262
LUXOR 404	4040000	4003468404003	262
LUXOR 405	4050000	4003468405000	264
LUXOR 408 S	4080100	4003468408032	265
LUXOR 409 S	4090100	4003468409039	265
LUXOR 411	4110000	4003468411001	266
LUXOR 414	4140000	4003468414002	270
LUXOR 426	4260000	4003468426005	268
LUXOR 440	4400000	4003468440001	266
LUXOR Set 4	4990004	4003468499047	271
LUXOR Set 5	4990005	4003468499054	271
M			
Masking clip	9070921	7612748005495	281
Mast mounting S	9070928	4003468901687	288
MEM 190 a	1900001	4003468190050	40
Memory card OBELISK top2	9070404	4003468904053	279
Memory module PHARAO-II	9070328	4003468903414	289
Meteodata 139 KNX	1399200	4003468130001	244
Meteodata 140 basic KNX	1409205	4003468140000	242
Meteodata 140 S 24V GPS KNX	1409204	4003468140048	242
Meteodata 140 S 24V KNX	1409201	4003468140031	242
Meteodata 140 S GPS KNX	1409208	4003468140062	242
Meteodata 140 S KNX	1409207	4003468140055	242
Multiple contact strip	9075141	4003468904688	278
O			
OSIRIA 220 AR KNX	5009200	4003468500057	256
OSIRIA 230 AR KNX	5009210	4003468500071	256
OSIRIA 230 SR KNX	5009211	4003468500088	256
OSIRIA 232 BQ KNX	5009223	4003468500293	257
OSIRIA 240 AR KNX	5009230	4003468500132	256
OSIRIA 240 SR KNX	5009231	4003468500149	256

Type	Art.-No.	EAN / GTIN	Page
OSIRIA 241 AR KNX	5009240	4003468500170	256
OSIRIA 241 BR KNX	5009241	4003468500187	256
OSIRIA 242 AR KNX	5009250	4003468500194	257
OSIRIA 242 SR KNX	5009251	4003468500200	257
OSIRIA 251 BQ KNX	5009252	4003468500279	257
OT-Box Standard	9070712	4003468904763	287
Outside temperature sensor	9070463	4003468900871	287
P			
PC set OBELISK top2	9070409	4003468904015	279
PHARAO-II 10 (AC)	5750210	4003468575185	274
PHARAO-II 11 (DC)	5759211	4003468575192	274
PHARAO-II 14 (AC)	5750014	4003468575093	274
PHARAO-II 15 (DC)	5759015	4003468575109	274
PHARAO-II 24 (AC)	5750024	4003468575116	274
PHARAO-II 25 (DC)	5759025	4003468575123	274
PHARAO-II extension 4AR (AC)	5759102	4003468575154	274
PlanoBox 1WH	9070731	7612748003873	281
PlanoCentro 000-EBK	2040103	7612748003286	108
PlanoCentro 000-ESR	2040104	7612748003293	108
PlanoCentro 000-EWH	2040102	7612748003279	108
PlanoCentro 000-UBK	2040203	7612748003323	108
PlanoCentro 000-USR	2040204	7612748003330	108
PlanoCentro 000-UWH	2040202	7612748003316	108
PlanoCentro 101-EBK	2030103	7612748002463	108
PlanoCentro 101-ESR	2030104	7612748002470	108
PlanoCentro 101-EWH	2030102	7612748002456	108
PlanoCentro 101-UBK	2030203	7612748002500	108
PlanoCentro 101-USR	2030204	7612748002517	108
PlanoCentro 101-UWH	2030202	7612748002494	108
PlanoCentro 201-EBK	2030503	7612748003101	110
PlanoCentro 201-ESR	2030504	7612748003118	110
PlanoCentro 201-EWH	2030502	7612748003095	110
PlanoCentro 201-UBK	2030603	7612748003149	110
PlanoCentro 201-USR	2030604	7612748003156	110
PlanoCentro 201-UWH	2030602	7612748003132	110
PlanoCentro 300-EBK	2030303	7612748003194	110
PlanoCentro 300-ESR	2030304	7612748003200	110
PlanoCentro 300-EWH	2030302	7612748003187	110
PlanoCentro 300-UBK	2030403	7612748003231	110
PlanoCentro 300-USR	2030404	7612748003248	110
PlanoCentro 300-UWH	2030402	7612748003224	110
PlanoCentro EBK-A KNX	2059103	7612748003651	232
PlanoCentro ESR-A KNX	2059104	7612748003668	232
PlanoCentro EWH-A KNX	2059102	7612748003644	232
PlanoCentro UBK-A KNX	2059203	7612748003699	232
PlanoCentro USR-A KNX	2059204	7612748003705	232
PlanoCentro UWH-A KNX	2059202	7612748003682	232
PlanoSpot 360 KNX DE BK	2039101	7612748005846	230
PlanoSpot 360 KNX DE SR	2039102	7612748005853	230
PlanoSpot 360 KNX DE WH	2039100	7612748005839	230
PlanoSet RQ EWH	9070736	7612748004696	281
PlanoSet RR EWH	9070740	7612748004658	281
Plug-in socket BZ	9070042	4003468900697	280
Plunge sensor RAMSES	9070379	4003468903711	287
Power supply 160 mA S KNX	9070922	4003468900956	254
Power supply 320 mA S KNX	9070923	4003468900963	254
Power supply 640 mA S KNX	9070924	4003468900970	254
Power unit 24 V DC	9079330	4003468903520	289
Power unit CO2-sensor	9070494	4003468904534	288
Power unit top2 GPS	9070892	4003468904718	279
PresenceLight 180	2000050	7612748001602	114
PresenceLight 180 BK	2000803	7612748002050	114
PresenceLight 180 SR	2000804	7612748002067	114
PresenceLight 180B-KNX BK	2009815	7612748003842	234
PresenceLight 180B-KNX SR	2009816	7612748003859	234
PresenceLight 180B-KNX WH	2009050	7612748003835	234
PresenceLight 360	2000000	7612748001107	86
PresenceLight 360 BK	2000800	7612748002029	86
PresenceLight 360 SR	2000801	7612748002036	86
PresenceLight 360B-KNX BK	2009812	7612748003767	222
PresenceLight 360B-KNX SR	2009813	7612748003774	222
PresenceLight 360B-KNX WH	2009000	7612748003750	222
Programming cable PHARAO	9070252	4003468902851	289
Q			
QuickFix concrete flush-mounted box	9070521	7612748000742	282
QuickFix concrete round cover	9070519	7612748000964	282
QuickFix concrete square cover	9070518	7612748000971	282
QuickFix flush-mounted housing	9070522	7612748000551	282
QuickFix round cover	9070517	7612748000568	282
QuickFix square cover	9070516	7612748000575	282
QuickSafe	9070531	7612748000582	282
R			
RAMSES 366 / 1 top2	3660100	4003468360026	168
RAMSES 701	7010001	4003468701140	180
RAMSES 702	7020001	4003468702055	180
RAMSES 703	7030001	4003468703052	180
RAMSES 704	7040001	4003468704028	180
RAMSES 705	7050001	4003468705032	180
RAMSES 706	7060001	4003468706022	180
RAMSES 707	7070001	4003468707029	180
RAMSES 708	7080001	4003468708026	180
RAMSES 709	7090001	4003468709030	180
RAMSES 712 KNX	7129200	4003468712009	212
RAMSES 713 FC KNX	7139202	4003468713020	220
RAMSES 713 S KNX	7139201	4003468713013	213
RAMSES 714	7140002	4003468714126	184
RAMSES 714 A	7140016	4003468714133	184
RAMSES 721	7210030	4003468721018	176
RAMSES 722	7220030	4003468722015	176
RAMSES 722 S	7220801	4003468722022	174
RAMSES 725	7250030	4003468725016	176
RAMSES 741	7410130	4003468741023	182
RAMSES 741 RA	7410131	4003468741030	182
RAMSES 746	7460130	4003468746028	182
RAMSES 746 RA	7460131	4003468746035	182
RAMSES 748	7480130	4003468748022	182
RAMSES 748 RA	7480131	4003468748039	182
RAMSES 751 RA	7510131	4003468751008	184
RAMSES 782	7820030	4003468782019	176
RAMSES 784	7840030	4003468784013	176
RAMSES 784 S	7840801	4003468784020	174
RAMSES 811 top2	8119132	4003468811139	160
RAMSES 812 top2	8120132	4003468812037	162
RAMSES 813 top2 HF Set 1	8139501	4003468813218	164
RAMSES 813 top2 HF Set A	8139503	4003468813164	164
RAMSES 813 top2 HF Set S	8139505	4003468813188	164
RAMSES 816 top2 OT	8169132	4003468810002	170
RAMSES 831 top2	8319132	4003468831052	160

Type	Art.-No.	EAN / GTIN	Page
RAMSES 832 top2	8320132	4003468832035	162
RAMSES 833 top2 HF Set 1	8339501	4003468833049	166
RAMSES 833 top2 HF Set 2	8339502	4003468833056	166
RAMSES 856 top2 OT	8569132	4003468850084	172
RC filter	9070523	7612748001701	283
RM 16 S KNX	4940225	4003468491256	196
RM 16 T KNX	4940205	4003468490846	198
RM 4 I KNX	4940210	4003468490297	194
RM 4 U KNX	4940223	4003468490976	192
RM 8 I KNX	4940215	4003468490303	194
RM 8 S KNX	4940220	4003468490990	196
RM 8 T KNX	4940200	4003468490839	198
RME 4 I KNX	4930215	4003468493090	194
RME 4 U KNX	4930228	4003468490952	192
RME 8 S KNX	4930225	4003468493076	196
RME 8 T KNX	4930205	4003468490822	198
RMG 4 I KNX	4930210	4003468493083	194
RMG 4 U KNX	4930223	4003468490969	192
RMG 8 S KNX	4930220	4003468493069	196
RMG 8 T KNX	4930200	4003468490815	198
S			
SELEKTA 170 top2	1700100	4003468170533	22
SELEKTA 170 top2 24V	1704100	4003468170564	22
SELEKTA 171 top2 RC	1710100	4003468171004	22
SELEKTA 171 top2 RC 24V	1714100	4003468171035	22
SELEKTA 172 top2	1720100	4003468172001	22
SELEKTA 172 top2 24V	1724100	4003468172056	22
SELEKTA 175 top2	1750100	4003468100424	28
SendoPro 868-A	9070675	7612748002524	283
SME 2 S KNX	4910274	4003468491744	206
SMG 2 S KNX	4910273	4003468491737	206
Snap-on mounting 72 x 72	9070071	4003468900895	278
Socket RAMSES	9070605	4003468904657	286
SOTHIS 715	7150002	4003468715024	189
Spacer theLuxa P BK	9070909	4003468900420	283
Spacer theLuxa P WH	9070908	4003468900413	283
Spacer theLuxa S BK	9070907	4003468900345	283
Spacer theLuxa S WH	9070906	4003468900338	283
SPHINX 104-360	1040370	4003468104026	88
SPHINX 104-360 AP	1040360	4003468104002	88
SPHINX 104-360 / 2	1040372	4003468104033	88
SPHINX 104-360 / 2 AP	1040362	4003468104019	88
SPHINX 104-360 / 2 DIMplus	1040374	4003468104040	90
SPHINX 331 S KNX	1079215	4003468100394	237
SPHINX 332 S KNX	1079216	4003468100417	237
SPHINX RC 104	9070538	4003468904428	284
SPHINX RC 104 Pro	9070536	4003468904404	284
SUD 228 II	2280577	4003468228012	276
SUL 180 a	1800001	4003468183311	40
SUL 181 d	1810011	4003468182383	42
SUL 188 g	1880033	4003468181003	44
SUL 188 hw	1880108	4003468181010	44
SUL 189 hw	1890108	4003468181164	50
SUL 189 s	1890801	4003468180631	46
SUL 189 s 110V	1891801	4003468182093	46
SUL 191 w	1910011	4003468191040	42
SUL 285 / 2 T	2850033	4003468285022	52
SUL 289 g	2890033	4003468280096	48
SUL 289 h	2890008	4003468280089	48

Type	Art.-No.	EAN / GTIN	Page
Surface frame 110A WH	9070912	7612748004900	280
Surface frame 110B WH	9070918	7612748005464	280
Surface frame 75A WH	9070949	7612748005921	281
Surface frame compact	9070514	7612748000711	280
Surface frame ECO-IR 180	9070511	7612748000735	282
Surface frame ECO-IR 360	9070512	7612748000728	281
Surface frame LUXA 103-200	9070504	4003468904367	284
Surface frame PresenceLight	9070513	7612748001145	280
Surface-mounted light sensor	9070008	4003468900574	285
SYN 151 h	1510011	4003468151006	42
SYN 160 a	1600001	4003468161609	40
SYN 161 d	1610011	4003468161371	42
SYN 169 s	1690801	4003468160633	46
SYN 269 h	2690008	4003468260012	48
T			
TA 2 KNX	4969202	4003468496022	210
TA 4 KNX	4969204	4003468496046	210
TA 6 KNX	4969206	4003468496060	210
Temperature sensor	9070321	4003468903360	287
Temperature sensor RAMSES IP 65	9070459	4003468903810	286
Terminal cover 52,5 mm	9070061	4003468900802	278
theben-eltimo 020 S	0200000	4003468022313	36
theben-eltimo 020 S DCF	0200300	4003468024034	36
theben-timer 26	0260030	4003468020821	53
theben-timer 26 IP 44	0260855	4003468020166	53
theben-timer 27	0270930	4003468020869	53
theLeda E10 BK	1020912	4003468100448	138
theLeda E10 WH	1020911	4003468100431	138
theLeda E10L BK	1020712	4003468100103	140
theLeda E10L WH	1020711	4003468100516	140
theLeda E20 BK	1020914	4003468100462	138
theLeda E20 WH	1020913	4003468100455	138
theLeda E20L BK	1020714	4003468100493	140
theLeda E20L WH	1020713	4003468100523	140
theLeda E30 BK	1020916	4003468100486	138
theLeda E30 WH	1020915	4003468100479	138
theLeda E30L BK	1020716	4003468100509	140
theLeda E30L WH	1020715	4003468100530	140
theLuxa P220 BK	1010606	4003468100318	136
theLuxa P220 WH	1010605	4003468100288	136
theLuxa P300 BK	1010611	4003468100356	136
theLuxa P300 KNX BK	1019611	4003468100387	236
theLuxa P300 KNX WH	1019610	4003468100370	236
theLuxa P300 WH	1010610	4003468100332	136
theLuxa S150 BK	1010501	4003468100226	132
theLuxa S150 WH	1010500	4003468100219	132
theLuxa S180 BK	1010506	4003468100257	132
theLuxa S180 WH	1010505	4003468100240	132
theLuxa S360 BK	1010511	4003468100271	134
theLuxa S360 WH	1010510	4003468100264	134
theMova P360 KNX UP GR	1039601	7612748005419	240
theMova P360 KNX UP WH	1039600	7612748005402	240
theMova P360-100 UP GR	1030601	7612748005112	154
theMova P360-100 UP WH	1030600	7612748005105	154
theMova S360 KNX AP GR	1039551	7612748005389	238
theMova S360 KNX AP WH	1039550	7612748005372	238
theMova S360 KNX DE GR	1039561	7612748005358	238
theMova S360 KNX DE WH	1039560	7612748005341	238
theMova S360-100 AP GR	1030551	7612748005020	152

Index 2016
Alphabetical T ... Z

Type	Art.-No.	EAN / GTIN	Page
theMova S360-100 AP WH	1030550	7612748005013	152
theMova S360-100 DE GR	1030561	7612748004993	150
theMova S360-100 DE WH	1030560	7612748004986	150
theMova S360-101 AP GR	1030556	7612748005082	152
theMova S360-101 AP WH	1030555	7612748005075	152
theMova S360-101 DE GR	1030566	7612748005051	150
theMova S360-101 DE WH	1030565	7612748005044	150
thePrema P360 KNX UP GR	2079001	7612748004467	228
thePrema P360 KNX UP WH	2079000	7612748004450	228
thePrema P360 Slave E UP GR	2070131	7612748005631	104
thePrema P360 Slave E UP WH	2070130	7612748005624	104
thePrema P360-101 E UP GR	2070106	7612748005549	104
thePrema P360-101 E UP WH	2070105	7612748005532	104
thePrema S360 KNX UP GR	2079501	7612748004504	228
thePrema S360 KNX UP WH	2079500	7612748004498	228
thePrema S360 Slave E UP GR	2070631	7612748005662	102
thePrema S360 Slave E UP WH	2070630	7612748005655	102
thePrema S360-100 E UP GR	2070601	7612748005600	102
thePrema S360-100 E UP WH	2070600	7612748005594	102
thePrema S360-101 E UP GR	2070606	7612748005570	102
thePrema S360-101 E UP WH	2070605	7612748005563	102
theRolla P032	0320100	4003468030110	34
theRolla S031	0310100	4003468030004	34
theRonda P360 KNX UP GR	2089001	7612748005440	226
theRonda P360 KNX UP WH	2089000	7612748005433	226
theRonda P360-100 UP GR	2080001	7612748005143	92
theRonda P360-100 UP WH	2080000	7612748005136	92
theRonda P360-101 UP GR	2080006	7612748005174	92
theRonda P360-101 UP WH	2080005	7612748005167	92
theSenda P	9070910	4003468900475	285
theSenda S	9070911	4003468900505	285
theServa S110	8254100	4003468820070	258
TM 179 h	1790008	4003468170151	50
TM 345 B	3450730	4003468340103	58
TM 345 M	3450731	4003468340110	58
TR 608 top2 S	6080101	4003468600115	28
TR 609 top2 S	6090101	4003468600122	28
TR 610 top2	6100103	4003468611685	18
TR 610 top2 24V	6104100	4003468613009	18
TR 610 top2 G	6100110	4003468612590	18
TR 611 top2	6110103	4003468612071	20
TR 611 top2 24V	6114100	4003468613016	20
TR 611 top2 RC	6110300	4003468611838	20
TR 611 top2 RC 24V	6114300	4003468612231	20
TR 612 top2	6120103	4003468612125	18
TR 612 top2 24V	6124100	4003468613023	18
TR 622 top2	6220103	4003468612170	20
TR 622 top2 24V	6224100	4003468613030	20
TR 635 top2	6350100	4003468630006	30
TR 636 top2	6360100	4003468630020	30
TR 641 top2	6410100	4003468641088	24
TR 641 top2 RC	6410300	4003468641118	24
TR 641 top2 RC 24V	6414300	4003468641125	24
TR 642 top2	6420100	4003468642085	24
TR 642 top2 RC	6420300	4003468642108	24
TR 642 top2 RC 24V	6424300	4003468642115	24
TR 644 top2	6440100	4003468644232	24
TR 644 top2 RC	6440300	4003468644218	24
TR 648 top2 RC KNX	6489212	4003468640012	248
TR 648 top2 RC-DCF KNX	6489210	4003468640005	248
TR 684-1 top2	6840100	4003468680254	32
TR 684-2 top2	6840101	4003468680261	32
V			
Valve adapter VA 78	9070436	4003468904220	288
Valve adapter VA 80	9070437	4003468904237	288
VARIA 826 S BK KNX	8269211	4003468820056	211
VARIA 826 S WH KNX	8269210	4003468820049	211
W			
Wall mounting kit 17,5 mm	9070065	4003468900833	278
Wall mounting kit 35 mm	9070064	4003468900826	278
Wall mounting kit 52,5 mm	9070050	4003468900734	278
Wall mounting kit 70 mm	9070049	4003468900727	278
A			
ZS 600 DCF KNX	6009200	4003468600009	250

Art.-No.	Type	EAN / GTIN	Page
0010002	ELPA 1	4003468010518	66
0030002	ELPA 3	4003468010501	66
0060002	ELPA 6	4003468010525	66
0060003	ELPA 6 plus	4003468000052	66
0070002	ELPA 7	4003468007006	66
0080002	ELPA 8	4003468010068	68
0090001	ELPA 9	4003468010129	68
0200000	theben-eltimo 020 S	4003468022313	36
0200300	theben-eltimo 020 S DCF	4003468024034	36
0260030	theben-timer 26	4003468020821	53
0260855	theben-timer 26 IP 44	4003468020166	53
0270930	theben-timer 27	4003468020869	53
0310100	theRolla S031	4003468030004	34
0320100	theRolla P032	4003468030110	34
0410002	ELPA 041	4003468041000	70
0470002	ELPA 047	4003468047002	70
0770033	FRI 77 g	4003468070024	54
0770802	FRI 77 h-2	4003468070048	54
0770832	FRI 77 g-2	4003468070086	54
1010500	theLuxa S150 WH	4003468100219	132
1010501	theLuxa S150 BK	4003468100226	132
1010505	theLuxa S180 WH	4003468100240	132
1010506	theLuxa S180 BK	4003468100257	132
1010510	theLuxa S360 WH	4003468100264	134
1010511	theLuxa S360 BK	4003468100271	134
1010605	theLuxa P220 WH	4003468100288	136
1010606	theLuxa P220 BK	4003468100318	136
1010610	theLuxa P300 WH	4003468100332	136
1010611	theLuxa P300 BK	4003468100356	136
1019610	theLuxa P300 KNX WH	4003468100370	236
1019611	theLuxa P300 KNX BK	4003468100387	236
1020711	theLeda E10L WH	4003468100516	140
1020712	theLeda E10L BK	4003468100103	140
1020713	theLeda E20L WH	4003468100523	140
1020714	theLeda E20L BK	4003468100493	140
1020715	theLeda E30L WH	4003468100530	140
1020716	theLeda E30L BK	4003468100509	140
1020751	LUXA 102 FL LED 8W W WH	4003468100547	146
1020752	LUXA 102 FL LED 8W W BK	4003468100554	146
1020753	LUXA 102 FL LED 16W W WH	4003468100561	146
1020754	LUXA 102 FL LED 16W W BK	4003468100578	146
1020771	LUXA 102 FL LED 8W WH	4003468100141	146
1020772	LUXA 102 FL LED 8W BK	4003468100165	146
1020773	LUXA 102 FL LED 16W WH	4003468100172	146
1020774	LUXA 102 FL LED 16W BK	4003468100189	146
1020775	LUXA 102 FL LED 32W WH	4003468100196	146
1020776	LUXA 102 FL LED 32W BK	4003468100202	146
1020911	theLeda E10 WH	4003468100431	138
1020912	theLeda E10 BK	4003468100448	138
1020913	theLeda E20 WH	4003468100455	138
1020914	theLeda E20 BK	4003468100462	138
1020915	theLeda E30 WH	4003468100479	138
1020916	theLeda E30 BK	4003468100486	138
1020951	LUXA 102-140 LED 8W W WH	4003468100585	142
1020952	LUXA 102-140 LED 8W W BK	4003468100592	142
1020953	LUXA 102-140 LED 16W W WH	4003468100608	142
1020954	LUXA 102-140 LED 16W W BK	4003468100615	142
1020961	LUXA 102-150 / 150 W white	4003468102008	148
1020962	LUXA 102-150 / 150 W black	4003468102015	148
1020963	LUXA 102-150 / 500 W white	4003468102022	148
1020964	LUXA 102-150 / 500 W black	4003468102039	148
1020971	LUXA 102-140 LED 8W WH	4003468100028	142
1020972	LUXA 102-140 LED 8W BK	4003468100035	142
1020973	LUXA 102-140 LED 16W WH	4003468100059	142
1020974	LUXA 102-140 LED 16W BK	4003468100066	142
1020975	LUXA 102-180 LED 32W WH	4003468100080	144
1020976	LUXA 102-180 LED 32W BK	4003468100097	144
1030030	LUXA 103-200	4003468103043	156
1030031	LUXA 103-200 T	4003468103050	156
1030550	theMova S360-100 AP WH	7612748005013	152
1030551	theMova S360-100 AP GR	7612748005020	152
1030555	theMova S360-101 AP WH	7612748005075	152
1030556	theMova S360-101 AP GR	7612748005082	152
1030560	theMova S360-100 DE WH	7612748004986	150
1030561	theMova S360-100 DE GR	7612748004993	150
1030565	theMova S360-101 DE WH	7612748005044	150
1030566	theMova S360-101 DE GR	7612748005051	150
1030600	theMova P360-100 UP WH	7612748005105	154
1030601	theMova P360-100 UP GR	7612748005112	154
1039550	theMova S360 KNX AP WH	7612748005372	238
1039551	theMova S360 KNX AP GR	7612748005389	238
1039560	theMova S360 KNX DE WH	7612748005341	238
1039561	theMova S360 KNX DE GR	7612748005358	238
1039600	theMova P360 KNX UP WH	7612748005402	240
1039601	theMova P360 KNX UP GR	7612748005419	240
1040360	SPHINX 104-360 AP	4003468104002	88
1040362	SPHINX 104-360 / 2 AP	4003468104019	88
1040370	SPHINX 104-360	4003468104026	88
1040372	SPHINX 104-360 / 2	4003468104033	88
1040374	SPHINX 104-360 / 2 DIMplus	4003468104040	90
1079215	SPHINX 331 S KNX	4003468100394	237
1079216	SPHINX 332 S KNX	4003468100417	237
1080700	LUNA 108 EL	4003468108000	76
1080710	LUNA 108 AL	4003468108017	76
1090100	LUNA 109 AL	4003468109007	76
1090200	LUNA 109 EL	4003468109014	76
1100100	LUNA 110 AL	4003468111109	76
1100200	LUNA 110 EL	4003468111154	76
1104100	LUNA 110 AL 24V	4003468111161	76
1104200	LUNA 110 EL 24V	4003468111222	76
1110100	LUNA 111 top2 AL	4003468111147	78
1110200	LUNA 111 top2 EL	4003468111116	78
1120100	LUNA 112 top2 AL	4003468112007	78
1120200	LUNA 112 top2 EL	4003468112014	78
1200100	LUNA 120 top2 AL	4003468120002	80
1200200	LUNA 120 top2 EL	4003468120019	80
1210100	LUNA 121 top2 RC AL	4003468121009	80
1210200	LUNA 121 top2 RC EL	4003468121016	80
1214100	LUNA 121 top2 RC AL 24V	4003468121054	80
1220100	LUNA 122 top2 RC AL	4003468122006	80
1220200	LUNA 122 top2 RC EL	4003468122013	80
1260701	LUNA 126 star	4003468126035	82
1270700	LUNA 127 star	4003468127001	82
1280700	LUNA 128 star	4003468128008	82
1290700	LUNA 129 star-time	4003468129005	82
1319201	LUNA 131 S KNX	4003468131039	246
1319700	LUNA 131 DDC	4003468131022	276
1339200	LUNA 133 KNX	4003468133002	147

Index 2016
Numerical 1349200 ... 2040104

Art.-No.	Type	EAN / GTIN	Page
1349200	LUNA 134 KNX	4003468130032	245
1399200	Meteodata 139 KNX	4003468130001	244
1409201	Meteodata 140 S 24V KNX	4003468140031	242
1409204	Meteodata 140 S 24V GPS KNX	4003468140048	242
1409205	Meteodata 140 basic KNX	4003468140000	242
1409207	Meteodata 140 S KNX	4003468140055	242
1409208	Meteodata 140 S GPS KNX	4003468140062	242
1420621	BZ 142-1 230V	4003468140086	60
1420721	BZ 142-1	4003468140017	60
1420723	BZ 142-3	4003468140024	60
1420821	BZ 142-1 10V	4003468140420	60
1420823	BZ 142-3 10V	4003468140369	60
1424721	BZ 142-1 24V	4003468140932	60
1430721	BZ 143-1	4003468140130	60
1450000	BZ 145	4003468140918	60
1459024	BZ 145 24V	4003468141021	60
1460000	BZ 146	4003468146002	62
1470000	BZ 147	4003468147009	62
1480000	BZ 148	4003468148006	62
1510011	SYN 151 h	4003468151006	42
1600001	SYN 160 a	4003468161609	40
1610011	SYN 161 d	4003468161371	42
1690801	SYN 169 s	4003468160633	46
1700100	SELEKTA 170 top2	4003468170533	22
1704100	SELEKTA 170 top2 24V	4003468170564	22
1710100	SELEKTA 171 top2 RC	4003468171004	22
1714100	SELEKTA 171 top2 RC 24V	4003468171035	22
1720100	SELEKTA 172 top2	4003468172001	22
1724100	SELEKTA 172 top2 24V	4003468172056	22
1750100	SELEKTA 175 top2	4003468100424	28
1790008	TM 179 h	4003468170151	50
1800001	SUL 180 a	4003468183311	40
1810011	SUL 181 d	4003468182383	42
1880033	SUL 188 g	4003468181003	44
1880108	SUL 188 hw	4003468181010	44
1890108	SUL 189 hw	4003468181164	50
1890801	SUL 189 s	4003468180631	46
1891801	SUL 189 s 110V	4003468182093	46
1900001	MEM 190 a	4003468190050	40
1910011	SUL 191 w	4003468191040	42
2000000	PresenceLight 360	7612748001107	86
2000050	PresenceLight 180	7612748001602	114
2000800	PresenceLight 360 BK	7612748002029	86
2000801	PresenceLight 360 SR	7612748002036	86
2000803	PresenceLight 180 BK	7612748002050	114
2000804	PresenceLight 180 SR	7612748002067	114
2009000	PresenceLight 360B-KNX WH	7612748003750	222
2009050	PresenceLight 180B-KNX WH	7612748003835	234
2009812	PresenceLight 360B-KNX BK	7612748003767	222
2009813	PresenceLight 360B-KNX SR	7612748003774	222
2009815	PresenceLight 180B-KNX BK	7612748003842	234
2009816	PresenceLight 180B-KNX SR	7612748003859	234
2010001	compact office DIM	7612748000773	94
2010010	compact office DALI WH	7612748004054	96
2010011	compact office DALI BK	7612748004061	96
2010012	compact office DALI SR	7612748004078	96
2010080	compact passimo WH	7612748003354	100
2010090	compact passage	7612748001626	98
2010803	compact office DIM BK	7612748002715	94
2010804	compact office DIM SR	7612748002722	94
2010806	compact passage BK	7612748002746	98
2010807	compact passage SR	7612748002753	98
2010809	compact passimo BK	7612748003361	100
2010810	compact passimo SR	7612748003378	100
2014000	compact office 24V	7612748001039	118
2014001	compact office 24V Lux	7612748001121	120
2014090	compact passage 24V	7612748001725	122
2014800	compact office 24V BK	7612748002777	118
2014801	compact office 24V SR	7612748002784	118
2014803	compact office 24V Lux BK	7612748002807	120
2014804	compact office 24V Lux SR	7612748002814	120
2014806	compact passage 24V BK	7612748002838	122
2014807	compact passage 24V SR	7612748002845	122
2014810	compact passimo 24V WH	7612748004153	124
2014811	compact passimo 24V BK	7612748004160	124
2014812	compact passimo 24V SR	7612748004177	124
2019280	compact passimo KNX WH	7612748003439	224
2019290	compact passage KNX	7612748001732	224
2019803	compact passage KNX BK	7612748002890	224
2019804	compact passage KNX SR	7612748002906	224
2019809	compact passimo KNX BK	7612748003446	224
2019810	compact passimo KNX SR	7612748003453	224
2020050	ECO-IR 180A	7612748000476	116
2020401	ECO-IR DUAL-C NT	7612748000872	106
2020809	ECO-IR 180A BK	7612748002111	116
2020810	ECO-IR 180A SR	7612748002128	116
2020815	ECO-IR DUAL-C NT BK	7612748002173	106
2020816	ECO-IR DUAL-C NT SR	7612748002180	106
2024000	ECO-IR 360-24V	7612748000544	126
2024050	ECO-IR 180-24V	7612748000537	128
2024800	ECO-IR 360-24V BK	7612748002203	126
2024801	ECO-IR 360-24V SR	7612748002210	126
2024803	ECO-IR 180-24V BK	7612748002234	128
2024804	ECO-IR 180-24V SR	7612748002241	128
2030102	PlanoCentro 101-EWH	7612748002456	108
2030103	PlanoCentro 101-EBK	7612748002463	108
2030104	PlanoCentro 101-ESR	7612748002470	108
2030202	PlanoCentro 101-UWH	7612748002494	108
2030203	PlanoCentro 101-UBK	7612748002500	108
2030204	PlanoCentro 101-USR	7612748002517	108
2030302	PlanoCentro 300-EWH	7612748003187	110
2030303	PlanoCentro 300-EBK	7612748003194	110
2030304	PlanoCentro 300-ESR	7612748003200	110
2030402	PlanoCentro 300-UWH	7612748003224	110
2030403	PlanoCentro 300-UBK	7612748003231	110
2030404	PlanoCentro 300-USR	7612748003248	110
2030502	PlanoCentro 201-EWH	7612748003095	110
2030503	PlanoCentro 201-EBK	7612748003101	110
2030504	PlanoCentro 201-ESR	7612748003118	110
2030602	PlanoCentro 201-UWH	7612748003132	110
2030603	PlanoCentro 201-UBK	7612748003149	110
2030604	PlanoCentro 201-USR	7612748003156	110
2039100	PlanoSpot 360 KNX DE WH	7612748005839	230
2039101	PlanoSpot 360 KNX DE BK	7612748005846	230
2039102	PlanoSpot 360 KNX DE SR	7612748005853	230
2040102	PlanoCentro 000-EWH	7612748003279	108
2040103	PlanoCentro 000-EBK	7612748003286	108
2040104	PlanoCentro 000-ESR	7612748003293	108

Art.-No.	Type	EAN / GTIN	Page
2040202	PlanoCentro 000-UWH	7612748003316	108
2040203	PlanoCentro 000-UBK	7612748003323	108
2040204	PlanoCentro 000-USR	7612748003330	108
2059102	PlanoCentro EWH-A KNX	7612748003644	232
2059103	PlanoCentro EBK-A KNX	7612748003651	232
2059104	PlanoCentro ESR-A KNX	7612748003668	232
2059202	PlanoCentro UWH-A KNX	7612748003682	232
2059203	PlanoCentro UBK-A KNX	7612748003699	232
2059204	PlanoCentro USR-A KNX	7612748003705	232
2070105	thePrema P360-101 E UP WH	7612748005532	104
2070106	thePrema P360-101 E UP GR	7612748005549	104
2070130	thePrema P360 Slave E UP WH	7612748005624	104
2070131	thePrema P360 Slave E UP GR	7612748005631	104
2070600	thePrema S360-100 E UP WH	7612748005594	102
2070601	thePrema S360-100 E UP GR	7612748005600	102
2070605	thePrema S360-101 E UP WH	7612748005563	102
2070606	thePrema S360-101 E UP GR	7612748005570	102
2070630	thePrema S360 Slave E UP WH	7612748005655	102
2070631	thePrema S360 Slave E UP GR	7612748005662	102
2079000	thePrema P360 KNX UP WH	7612748004450	228
2079001	thePrema P360 KNX UP GR	7612748004467	228
2079500	thePrema S360 KNX UP WH	7612748004498	228
2079501	thePrema S360 KNX UP GR	7612748004504	228
2080000	theRonda P360-100 UP WH	7612748005136	92
2080001	theRonda P360-100 UP GR	7612748005143	92
2080005	theRonda P360-101 UP WH	7612748005167	92
2080006	theRonda P360-101 UP GR	7612748005174	92
2089000	theRonda P360 KNX UP WH	7612748005433	226
2089001	theRonda P360 KNX UP GR	7612748005440	226
2280577	SUD 228 II	4003468228012	276
2690008	SYN 269 h	4003468260012	48
2850033	SUL 285 / 2 T	4003468285022	52
2890008	SUL 289 h	4003468280089	48
2890033	SUL 289 g	4003468280096	48
3450730	TM 345 B	4003468340103	58
3450731	TM 345 M	4003468340110	58
3660100	RAMSES 366 / 1 top2	4003468360026	168
4000000	LUXOR 400	4003468400005	262
4020000	LUXOR 402	4003468402009	262
4040000	LUXOR 404	4003468404003	262
4050000	LUXOR 405	4003468405000	264
4080100	LUXOR 408 S	4003468408032	265
4090100	LUXOR 409 S	4003468409039	265
4110000	LUXOR 411	4003468411001	266
4140000	LUXOR 414	4003468414002	270
4260000	LUXOR 426	4003468426005	268
4400000	LUXOR 440	4003468440001	266
4900273	HMT 6 KNX	4003468490532	216
4900274	HMT 12 KNX	4003468490549	216
4910272	DMB 2 S	4003468491720	264
4910273	SMG 2 S KNX	4003468491737	206
4910274	SME 2 S KNX	4003468491744	206
4920200	FCA 1 KNX	4003468492000	221
4930200	RMG 8 T KNX	4003468490815	198
4930205	RME 8 T KNX	4003468490822	198
4930210	RMG 4 I KNX	4003468493083	194
4930215	RME 4 I KNX	4003468493090	194
4930220	RMG 8 S KNX	4003468493069	196
4930223	RMG 4 U KNX	4003468490969	192
4930225	RME 8 S KNX	4003468493076	196
4930228	RME 4 U KNX	4003468490952	192
4930230	BMG 6 T KNX	4003468490204	208
4930235	BME 6 T KNX	4003468490242	208
4930240	HMG 6 T KNX	4003468490129	214
4930245	HME 6 T KNX	4003468490198	214
4930250	JMG 4 T KNX	4003468490051	200
4930255	JME 4 T KNX	4003468490075	200
4930260	JMG 4 T 24V KNX	4003468490853	202
4930265	JME 4 T 24V KNX	4003468490860	202
4930270	DMG 2 T KNX	4003468490006	204
4930275	DME 2 T KNX	4003468490013	204
4930279	DMB 1 T KNX	4003468490020	204
4940200	RM 8 T KNX	4003468490839	198
4940205	RM 16 T KNX	4003468490846	198
4940210	RM 4 I KNX	4003468490297	194
4940215	RM 8 I KNX	4003468490303	194
4940220	RM 8 S KNX	4003468490990	196
4940223	RM 4 U KNX	4003468490976	192
4940225	RM 16 S KNX	4003468491256	196
4940230	BM 6 T KNX	4003468490716	208
4940235	BM 12 T KNX	4003468490723	208
4940240	HM 6 T KNX	4003468490754	214
4940245	HM 12 T KNX	4003468490761	214
4940250	JM 4 T KNX	4003468490778	200
4940255	JM 8 T KNX	4003468490785	200
4940260	JM 4 T 24V KNX	4003468490877	202
4940265	JM 8 T 24V KNX	4003468490884	202
4940270	DM 2 T KNX	4003468490808	204
4940275	DM 4 T KNX	4003468490808	204
4969202	TA 2 KNX	4003468496022	210
4969204	TA 4 KNX	4003468496046	210
4969206	TA 6 KNX	4003468496060	210
4990004	LUXOR Set 4	4003468499047	271
4990005	LUXOR Set 5	4003468499054	271
5009200	OSIRIA 220 AR KNX	4003468500057	256
5009210	OSIRIA 230 AR KNX	4003468500071	256
5009211	OSIRIA 230 SR KNX	4003468500088	256
5009223	OSIRIA 232 BQ KNX	4003468500293	257
5009230	OSIRIA 240 AR KNX	4003468500132	256
5009231	OSIRIA 240 SR KNX	4003468500149	256
5009240	OSIRIA 241 AR KNX	4003468500170	256
5009241	OSIRIA 241 BR KNX	4003468500187	256
5009250	OSIRIA 242 AR KNX	4003468500194	257
5009251	OSIRIA 242 SR KNX	4003468500200	257
5009252	OSIRIA 251 BQ KNX	4003468500279	257
5320001	DIMAX 532 plus	4003468530016	72
5340001	DIMAX 534 plus	4003468530009	72
5750014	PHARAO-II 14 (AC)	4003468575093	274
5750024	PHARAO-II 24 (AC)	4003468575116	274
5750210	PHARAO-II 10 (AC)	4003468575185	274
5759015	PHARAO-II 15 (DC)	4003468575109	274
5759025	PHARAO-II 25 (DC)	4003468575123	274
5759102	PHARAO-II extension 4AR (AC)	4003468575154	274
5759211	PHARAO-II 11 (DC)	4003468575192	274
6009200	ZS 600 DCF KNX	4003468600009	250
6080101	TR 608 top2 S	4003468600115	28
6090101	TR 609 top2 S	4003468600122	28
6100103	TR 610 top2	4003468611685	18

Index 2016
Numerical 610110 ... 9070511

Art.-No.	Type	EAN / GTIN	Page
6100110	TR 610 top2 G	4003468612590	18
6104100	TR 610 top2 24V	4003468613009	18
6110103	TR 611 top2	4003468612071	20
6110300	TR 611 top2 RC	4003468611838	20
6114100	TR 611 top2 24V	4003468613016	20
6114300	TR 611 top2 RC 24V	4003468612231	20
6120103	TR 612 top2	4003468612125	18
6124100	TR 612 top2 24V	4003468613023	18
6220103	TR 622 top2	4003468612170	20
6224100	TR 622 top2 24V	4003468613030	20
6350100	TR 635 top2	4003468630006	30
6360100	TR 636 top2	4003468630020	30
6410100	TR 641 top2	4003468641088	24
6410300	TR 641 top2 RC	4003468641118	24
6414300	TR 641 top2 RC 24V	4003468641125	24
6420100	TR 642 top2	4003468642085	24
6420300	TR 642 top2 RC	4003468642108	24
6424300	TR 642 top2 RC 24V	4003468642115	24
6440100	TR 644 top2	4003468644232	24
6440300	TR 644 top2 RC	4003468644218	24
6489210	TR 648 top2 RC-DCF KNX	4003468640005	248
6489212	TR 648 top2 RC KNX	4003468640012	248
6490104	EM 4 top2	4003468649008	26
6490900	EM LAN top2	4003468649015	26
6840100	TR 684-1 top2	4003468680254	32
6840101	TR 684-2 top2	4003468680261	32
7010001	RAMSES 701	4003468701140	180
7020001	RAMSES 702	4003468702055	180
7030001	RAMSES 703	4003468703052	180
7040001	RAMSES 704	4003468704028	180
7050001	RAMSES 705	4003468705032	180
7060001	RAMSES 706	4003468706022	180
7070001	RAMSES 707	4003468707029	180
7080001	RAMSES 708	4003468708026	180
7090001	RAMSES 709	4003468709030	180
7129200	RAMSES 712 KNX	4003468712009	212
7139201	RAMSES 713 S KNX	4003468713013	213
7139202	RAMSES 713 FC KNX	4003468713020	220
7140002	RAMSES 714	4003468714126	184
7140016	RAMSES 714 A	4003468714133	184
7150002	SOTHIS 715	4003468715024	189
7160101	AMUN 716 R	4003468716250	188
7169200	AMUN 716 KNX	4003468716205	219
7210030	RAMSES 721	4003468721018	176
7220030	RAMSES 722	4003468722015	176
7220801	RAMSES 722 S	4003468722022	174
7250030	RAMSES 725	4003468725016	176
7319200	CHEOPS drive KNX	4003468731000	218
7329201	CHEOPS control KNX	4003468732014	218
7410130	RAMSES 741	4003468741023	182
7410131	RAMSES 741 RA	4003468741030	182
7460130	RAMSES 746	4003468746028	182
7460131	RAMSES 746 RA	4003468746035	182
7480130	RAMSES 748	4003468748022	182
7480131	RAMSES 748 RA	4003468748039	182
7510131	RAMSES 751 RA	4003468751008	184
7820030	RAMSES 782	4003468782019	176
7840030	RAMSES 784	4003468784013	176
7840801	RAMSES 784 S	4003468784020	174

Art.-No.	Type	EAN / GTIN	Page
8119132	RAMSES 811 top2	4003468811139	160
8120132	RAMSES 812 top2	4003468812037	162
8139501	RAMSES 813 top2 HF Set 1	4003468813218	164
8139503	RAMSES 813 top2 HF Set A	4003468813164	164
8139505	RAMSES 813 top2 HF Set S	4003468813188	164
8169132	RAMSES 816 top2 OT	4003468810002	170
8254100	theServa S110	4003468820070	258
8269210	VARIA 826 S WH KNX	4003468820049	211
8269211	VARIA 826 S BK KNX	4003468820056	211
8319132	RAMSES 831 top2	4003468831052	160
8320132	RAMSES 832 top2	4003468832035	162
8339501	RAMSES 833 top2 HF Set 1	4003468833049	166
8339502	RAMSES 833 top2 HF Set 2	4003468833056	166
8559201	KNX-OT-Box S	4003468850220	253
8569132	RAMSES 856 top2 OT	4003468850084	172
9070001	Front panel kit	4003468900109	278
9070008	Surface-mounted light sensor	4003468900574	285
9070011	Analogue flush-mounted light sensor	4003468900604	285
9070041	Cover 55 x 55 for BZ	4003468902004	280
9070042	Plug-in socket BZ	4003468900697	280
9070043	Clamp BZ	4003468900703	280
9070049	Wall mounting kit 70 mm	4003468900727	278
9070050	Wall mounting kit 52,5 mm	4003468900734	278
9070061	Terminal cover 52,5 mm	4003468900802	278
9070064	Wall mounting kit 35 mm	4003468900826	278
9070065	Wall mounting kit 17,5 mm	4003468900833	278
9070071	Snap-on mounting 72 x 72	4003468900895	278
9070074	Cover 72 x 72 for BZ	4003468900925	280
9070075	Front kit BZ 142-3	4003468900932	280
9070191	External temperature sensor 1	4003468901915	286
9070192	External temperature sensor 2	4003468901922	286
9070212	Adapter plate RAMSES 714	4003468900796	286
9070245	Adapter RAMSES 72x / 78x	4003468902059	286
9070252	Programming cable PHARAO	4003468902851	289
9070271	Antenna DCF77 KNX	4003468903056	279
9070321	Temperature sensor	4003468903360	287
9070328	Memory module PHARAO-II	4003468903414	289
9070329	GSM cable PHARAO-II	4003468903483	288
9070367	Diode module	4003468903605	286
9070371	Flow temperature sensor RAMSES	4003468903629	287
9070379	Plunge sensor RAMSES	4003468903711	287
9070397	Interface USB KNX	4003468903995	255
9070404	Memory card OBELISK top2	4003468904053	279
9070409	PC set OBELISK top2	4003468904015	279
9070410	Antenna top2 RC-DCF	4003468904077	279
9070415	Digital surface-mounted light sensor	4003468904268	285
9070416	Analogue surface-mountedlight sensor	4003468904275	285
9070436	Valve adapter VA 78	4003468904220	288
9070437	Valve adapter VA 80	4003468904237	288
9070441	Actuator ALPHA 5 230 V	4003468901038	287
9070442	Actuator ALPHA 5 24 V	4003468901052	288
9070456	Digital flush-mounted light sensor	4003468904343	285
9070459	Temperature sensor RAMSES IP 65	4003468903810	286
9070463	Outside temperature sensor	4003468900871	287
9070480	Adapter plate RAMSES 70x	4003468904299	286
9070486	Adapter plate LUNA star	4003468907559	285
9070494	Power unit CO2-sensor	4003468904534	288
9070504	Surface frame LUXA 103-200	4003468904367	284
9070511	Surface frame ECO-IR 180	7612748000735	282

Art.-No.	Type	EAN / GTIN	Page
9070512	Surface frame ECO-IR 360	7612748000728	281
9070513	Surface frame PresenceLight	7612748001145	280
9070514	Surface frame compact	7612748000711	280
9070515	clic	7612748000919	283
9070516	QuickFix square cover	7612748000575	282
9070517	QuickFix round cover	7612748000568	282
9070518	QuickFix concrete square cover	7612748000971	282
9070519	QuickFix concrete round cover	7612748000964	282
9070521	QuickFix concrete flush-mounted box	7612748000742	282
9070522	QuickFix flush-mounted housing	7612748000551	282
9070523	RC filter	7612748001701	283
9070531	QuickSafe	7612748000582	282
9070536	SPHINX RC 104 Pro	4003468904404	284
9070538	SPHINX RC 104	4003468904428	284
9070601	Central part RAMSES 746	4003468904572	288
9070602	Central part RAMSES 741 / 748	4003468904589	288
9070603	Frame RAMSES 74x	4003468904596	288
9070605	Socket RAMSES	4003468904657	286
9070610	Antenna top2 RC-GPS	4003468903254	279
9070675	SendoPro 868-A	7612748002524	283
9070689	Junction casing, 115 x 115 x 100 mm	7612748002661	281
9070712	OT-Box Standard	4003468904763	287
9070722	DALI Gateway KNX	4003468900048	252
9070731	PlanoBox 1WH	7612748003873	281
9070736	PlanoSet RQ EWH	7612748004696	281
9070740	PlanoSet RR EWH	7612748004658	281
9070756	LUXA LED Corner angle BK	4003468900758	284
9070757	LUXA LED Corner angle BK	4003468900772	284
9070880	Line coupler S KNX	4003468900253	255
9070892	Power unit top2 GPS	4003468904718	279
9070902	Corner angle theLuxa S WH	4003468900277	284
9070903	Corner angle theLuxa S BK	4003468900284	284
9070904	Corner angle theLuxa P WH	4003468900291	284
9070905	Corner angle theLuxa P BK	4003468900314	284
9070906	Spacer theLuxa S WH	4003468900338	283
9070907	Spacer theLuxa S BK	4003468900345	283
9070908	Spacer theLuxa P WH	4003468900413	283
9070909	Spacer theLuxa P BK	4003468900420	283
9070910	theSenda P	4003468900475	285
9070911	theSenda S	4003468900505	285
9070912	Surface frame 110A WH	7612748004900	280
9070917	Ceiling installation box 73A	7612748004979	281
9070918	Surface frame 110B WH	7612748005464	280
9070921	Masking clip	7612748005495	281
9070922	Power supply 160 mA S KNX	4003468900956	254
9070923	Power supply 320 mA S KNX	4003468900963	254
9070924	Power supply 640 mA S KNX	4003468900970	254
9070926	Light sensor theRolla	4003468901021	278
9070928	Mast mounting S	4003468901687	288
9070949	Surface frame 75A WH	7612748005921	281
9075141	Multiple contact strip	4003468904688	278
9079330	Power unit 24 V DC	4003468903520	289

Index 2016
List of discontinued models

Type	Art.-No.	Type	Art.-No.
Discontinued models		Successors	
LUNA 121 top2 RC EL 24V	1214200	No successor	-
Meteodata 140 KNX	1409200	Meteodata 140 S KNX	1409207
Meteodata 140 GPS KNX	1409203	Meteodata 140 S GPS KNX	1409208
ECO-IR 180A	2020050	Alternative solution upon request	-
ECO-IR 180A BK	2020809	Alternative solution upon request	-
ECO-IR 180A SR	2020810	Alternative solution upon request	-
ECO-IR 360-24V	2024000	Alternative solution upon request	-
ECO-IR 180-24V	2024050	Alternative solution upon request	-
ECO-IR 360-24V BK	2024800	Alternative solution upon request	-
ECO-IR 360-24V SR	2024801	Alternative solution upon request	-
ECO-IR 180-24V BK	2024803	Alternative solution upon request	-
ECO-IR 180-24V SR	2024804	Alternative solution upon request	-
thePrema P360-101 UP WH	2070005	thePrema P360-101 E UP WH	2070105
thePrema P360-101 UP GR	2070006	thePrema P360-101 E UP GR	2070106
thePrema P360 Slave UP WH	2070030	thePrema P360 Slave E UP WH	2070130
thePrema P360 Slave UP GR	2070031	thePrema P360 Slave E UP GR	2070131
thePrema S360-100 UP WH	2070500	thePrema S360-100 E UP WH	2070600
thePrema S360-100 UP GR	2070501	thePrema S360-100 E UP GR	2070601
thePrema S360-101 UP WH	2070505	thePrema S360-101 E UP WH	2070605
thePrema S360-101 UP GR	2070506	thePrema S360-101 E UP GR	2070606
thePrema S360 Slave UP WH	2070530	thePrema S360 Slave E UP WH	2070630
thePrema S360 Slave UP GR	2070531	thePrema S360 Slave E UP GR	2070631
LUXOR Set3 (1x400 + 1x404 + 1x405)	4990003	No successor	-
RAMSES 784 HF Set 1	7849407	No successor	-
KNX-OT-Box	8559200	KNX-OT Box S	8559201
Mast mounting weather station	9070380	Mast mounting S	9070928
Actuator ALPHA 4 230 V	9070438	Actuator ALPHA 5 230 V	9070441
Actuator ALPHA 4 24 V	9070439	Actuator ALPHA 5 24 V	9070442
Surface frame ECO-IR 180	9070511	No successor	-
Surface frame ECO-IR 360	9070512	No successor	-
QuickFix square cover	9070516	No successor	-
QuickFix round cover	9070517	No successor	-
QuickFix concrete square cover	9070518	No successor	-
QuickFix concrete round cover	9070519	No successor	-
QuickFix concrete flush-mounted box	9070521	No successor	-
QuickFix flush-mounted housing	9070522	No successor	-
BCU bus coupling unit KNX	9070524	No successor	-
Surface frame ECO-IR 180 BK	9070640	No successor	-
Surface frame ECO-IR 180 SR	9070641	No successor	-
Surface frame ECO-IR 360 BK	9070643	No successor	-
Surface frame ECO-IR 360 SR	9070644	No successor	-
QuickFix round cover BK	9070646	No successor	-
QuickFix round cover SR	9070647	No successor	-
QuickFix square cover BK	9070649	No successor	-
QuickFix square cover SR	9070650	No successor	-
QuickFix concrete round cover BK	9070652	No successor	-
QuickFix concrete round cover SR	9070653	No successor	-
QuickFix concrete square cover BK	9070655	No successor	-
QuickFix concrete square cover SR	9070656	No successor	-

Imprint
Client: Theben AG, Haigerloch
Product data manager: Arne Mohl
Realisation: Theben AG, Haigerloch
Layout: Theben AG
Picture sources: Theben AG, Detlef Majer
Print: ProWachter GmbH

General conditions for the supply of products and services of the electrical and electronics industry („GL")

for commercial transactions between businesses

I. General provisions

1. Legal relations between Supplier and Purchaser in connection with supplies and/or services of the Supplier (hereinafter referred to as "Supplies") shall be solely governed by the present GL. The Purchaser's general terms and conditions shall apply only if expressly accepted by the Supplier in writing. The scope of delivery shall be determined by the congruent mutual written declarations.

2. The Supplier herewith reserves any industrial property rights and/or copyrights pertaining to its cost estimates, drawings and other documents (hereinafter referred to as "Documents"). The Documents shall not be made accessible to third parties without the Supplier's prior consent and shall, upon request, be returned without undue delay to the Supplier if the contract is not awarded to the Supplier. Sentences 1 and 2 shall apply mutatis mutandis to the Purchaser's Documents; these may, however, be made accessible to those third parties to whom the Supplier has rightfully subcontracted Supplies.

3. The Purchaser has the non-exclusive right to use standard software and firmware, provided that it remains unchanged, is used within the agreed performance parameters, and on the agreed equipment. Without express agreement the Purchaser may make one back-up copy of standard software.

4. Partial deliveries are allowed, unless they are unreasonable to accept for the Purchaser.

5. The term „claim for damages" used in the present GL also includes claims for indemnification for useless expenditure.

II. Prices, terms of payment, and set-off

1. Prices are ex works and excluding packaging; value added tax shall be added at the then applicable rate.

2. If the Supplier is also responsible for assembly or erection and unless otherwise agreed, the Purchaser shall pay the agreed remuneration and any incidental costs required, e. g. for traveling and transport as well as allowances.

3. Payments shall be made free Supplier's paying office.

4. The Purchaser may set off only those claims which are undisputed or nonappealable.

III. Retention of title

1. The items pertaining to the Supplies ("Retained Goods") shall remain the Supplier's property until each and every claim the Supplier has against the Purchaser on account of the business relationship has been fulfilled. If the combined value of the Supplier's security interests exceeds the value of all secured claims by more than 10 %, the Supplier shall release a corresponding part of the security interest if so requested by the Purchaser; the Supplier shall be entitled to choose which security interest it wishes to release.

2. For the duration of the retention of title, the Purchaser may not pledge the Retained Goods or use them as security, and resale shall be possible only for resellers in the ordinary course of their business and only on condition that the reseller receives payment from its customer or makes the transfer of property to the customer dependent upon the customer fulfilling its obligation to effect payment.

3. The Purchaser shall inform the Supplier forthwith of any seizure or other act of intervention by third parties.

4. Where the Purchaser fails to fulfil its duties, fails to make payment due, or otherwise violates its obligations the Supplier shall be entitled to rescind the contract and take back the Retained Goods in the case of continued failure following expiry of a reasonable remedy period set by the Supplier; the statutory provisions providing that a remedy period is not needed shall be unaffected. The Purchaser shall be obliged to return the Retained Goods. The fact that the Supplier takes back Retained Goods and/or exercises the retention of title, or has the Retained Goods seized, shall not be construed to constitute a rescission of the contract, unless the Supplier so expressly declares.

IV. Time for supplies; delay

1. Times set for Supplies shall only be binding if all Documents to be furnished by the Purchaser, necessary permits and approvals, especially concerning plans, are received in time and if agreed terms of payment and other obligations of the Purchaser are fulfilled. If these conditions are not fulfilled in time, times set shall be extended reasonably; this shall not apply if the Supplier is responsible for the delay.

2. If non-observance of the times set is due to force majeure such as mobilization, war, rebellion or similar events, e. g. strike or lockout, such time shall be extended accordingly. The same shall apply if the Supplier does not receive its own supplies in due time or in due form.

3. If the Supplier is responsible for the delay (hereinafter referred to as "Delay") and the Purchaser has demonstrably suffered a loss therefrom, the Purchaser may claim a compensation as liquidated damages of 0.5 % for every completed week of Delay, but in no case more than a total of 5 % of the price of that part of the Supplies which due to the Delay could not be put to the intended use.

4. Purchaser's claims for damages due to delayed Supplies as well as claims for damages in lieu of performance exceeding the limits specified in No. 3 above are excluded in all cases of delayed Supplies, even upon expiry of a time set to the Supplier to effect the Supplies. This shall not apply in cases of mandatory liability based on intent, gross negligence, or due to loss of life, bodily injury or damage to health. Rescission of the contract by the Purchaser based on statute is limited to cases where the Supplier is responsible for the delay. The above provisions do not imply a change in the burden of proof to the detriment of the Purchaser.

5. At the Supplier's request, the Purchaser shall declare within a reasonable period of time whether it, due to the delayed Supplies, rescinds the contract or insists on the delivery of the Supplies.

6. If dispatch or delivery, due to Purchaser's request, is delayed by more than one month after notification of the readiness for dispatch was given, the Purchaser may be charged, for every additional month commenced, storage costs of 0.5 % of the price of the items of the Supplies, but in no case more than a total of 5 %. The parties to the contract may prove that higher or, as the case may be, lower storage costs have been incurred.

V. Passing of risk

1. Even where delivery has been agreed freight free, the risk shall pass to the Purchaser as follows:

a) if the Supplies do not include assembly or erection, at the time when the Supplies are shipped or picked up by the carrier. Upon the Purchaser's request, the Supplier shall insure the Supplies against the usual risks of transport at the Purchaser's expense;

b) if the Supplies include assembly or erection, at the day of taking over in the Purchaser's own works or, if so agreed, after a fault-free trial run.

2. The risk shall pass to the Purchaser if dispatch, delivery, the start or performance of assembly or erection, the taking over in the Purchaser's own works, or the trial run is delayed for reasons for which the Purchaser is responsible or if the Purchaser has otherwise failed to accept the Supplies.

VI. Assembly and erection

Unless otherwise agreed in written form, assembly and erection shall be subject to the following provisions:

1. The Purchaser shall provide at its own expense and in due time:

a) all earth and construction work and other ancillary work outside the Supplier's scope, including the necessary skilled and unskilled labor, construction materials and tools,

b) the equipment and materials necessary for assembly and commissioning such as scaffolds, lifting equipment and other devices as well as fuels and lubricants,

c) energy and water at the point of use including connections, heating and lighting,

d) suitable dry and lockable rooms of sufficient size adjacent to the site for the storage of machine parts, apparatus, materials, tools, etc. and adequate working and recreation rooms for the erection personnel, including sanitary facilities as are appropriate in the specific circumstances; furthermore, the Purchaser shall take all measures it would take for the protection of its own possessions to protect the possessions of the Supplier and of the erection personnel at the site,

e) protective clothing and protective devices needed due to particular conditions prevailing on the specific site.

2. Before the erection work starts, the Purchaser shall unsolicitedly make available any information required concerning the location of concealed electric power, gas and water lines or of similar installations as well as the necessary structural data.

3. Prior to assembly or erection, the materials and equipment necessary for the work to start must be available on the site of assembly or erection and any preparatory work must have advanced to such a degree that assembly or erection can be started as agreed and carried out without interruption. Access roads and the site of assembly or erection must be level and clear.

4. If assembly, erection or commissioning is delayed due to circumstances for which the Supplier is not responsible, the Purchaser shall bear the reasonable costs incurred for idle times and any additional traveling expenditure of the Supplier or the erection personnel.

5. The Purchaser shall attest to the hours worked by the erection personnel towards the Supplier at weekly intervals and the Purchaser shall immediately confirm in written form if assembly, erection or commissioning has been completed.

6. If, after completion, the Supplier demands acceptance of the Supplies, the Purchaser shall comply therewith within a period of two weeks. In default thereof, acceptance is deemed to have taken place. Acceptance is also deemed to have been effected if the Supplies are put to use, after completion of an agreed test phase, if any.

VII. Receiving supplies

The Purchaser shall not refuse to receive Supplies due to minor defects.

VIII. Defects as to quality

The Supplier shall be liable for defects as to quality ("Sachmängel", hereinafter referred to as "Defects",) as follows:

1. Defective parts or defective services shall be, at the Supplier's discretion, repaired, replaced or provided again free of charge, provided that the reason for the Defect had already existed at the time when the risk passed.

2. Claims for repair or replacement are subject to a statute of limitations of 12 months calculated from the start of the statutory statute of limitations; the same shall apply mutatis mutandis in the case of rescission and reduction. This shall not apply where longer periods are prescribed by law according to Sec. 438 para. 1 No. 2 (buildings and things used for a building), Sec. 479 para. 1 (right of recourse), and Sec. 634a para. 1 No. 2 (defects of a building) German Civil Code ("BGB"), in the case of intent, fraudulent concealment of the Defect or non-compliance with guaranteed characteristics (Beschaffenheitsgarantie). The legal provisions regarding suspension of the statute of limitations ("Ablaufhemmung", "Hemmung") and recommencement of limitation periods shall be unaffected.

3. Notifications of Defect by the Purchaser shall be given in written form without undue delay.

4. In the case of notification of a Defect, the Purchaser may withhold payments to an amount that is in a reasonable proportion to the Defect. The Purchaser, however, may withhold payments only if the subject-matter of the notification of the Defect involved is justified and incontestable. The Purchaser has no right to withhold payments to the extent that its claim of a Defect is time-barred. Unjustified notifications of Defect shall entitle the Supplier to demand reimbursement of its expenses by the Purchaser.

5. The Supplier shall be given the opportunity to repair or to replace the defective good ("Nacherfüllung") within a reasonable period of time.

6. If repair or replacement is unsuccessful, the Purchaser is entitled to rescind the contract or reduce the remuneration; any claims for damages the Purchaser may have according to No. 10 shall be unaffected.

7. There shall be no claims based on Defect in cases of insignificant deviations from the agreed quality, of only minor impairment of usability, of natural wear and tear, or damage arising after the passing of risk from faulty or negligent handling, excessive strain, unsuitable equipment, defective civil works, inappropriate foundation soil, or claims based on particular external influences not assumed under the contract, or from non-reproducible software errors. Claims based on defects attributable to improper modifications or repair work carried out by the Purchaser or third parties and the consequences thereof are likewise excluded.

8. The Purchaser shall have no claim with respect to expenses incurred in the course of supplementary performance, including costs of travel, transport, labor, and material, to the extent that expenses are increased because the subject-matter of the Supplies has subsequently been brought to another location than the Purchaser's branch office, unless doing so complies with the normal use of the Supplies.

9. The Purchaser's right of recourse against the Supplier pursuant to Sec. 478 BGB is limited to cases where the Purchaser has not concluded an agreement with its customers exceeding the scope of the statutory provisions governing claims based on Defects. Moreover, No. 8 above shall apply mutatis mutandis to the scope of the right of recourse the Purchaser has against the Supplier pursuant to Sec. 478 para. 2 BGB.

10. The Purchaser shall have no claim for damages based on Defects. This shall not apply to the extent that a Defect has been fraudulently concealed, the guaranteed characteristics are not complied with, in the case of loss of life, bodily injury or damage to health, restrictions to liberty and/or intentionally or grossly negligent breach of contract on the part of the Supplier. The above provisions do not imply a change in the burden of proof to the detriment of the Purchaser. Any other or additional claims of the Purchaser exceeding the claims provided for in this Article VIII, based on a Defect, are excluded.

IX. Indusrial property rights and copyright; defects in title

1. Unless otherwise agreed, the Supplier shall provide the Supplies free from third parties' industrial property rights and copyrights (hereinafter referred to as "IPR") with respect to the country of the place of delivery only. If a third party asserts a justified claim against the Purchaser based on an infringement of an IPR by the Supplies made by the Supplier and used in conformity with the contract, the Supplier shall be liable to the Purchaser within the time period stipulated in Article VIII No. 2 as follows:

a) The Supplier shall choose whether to acquire, at its own expense, the right to use the IPR with respect to the Supplies concerned or whether to modify the Supplies such that they no longer infringe the IPR or replace them. If this would be impossible for the Supplier under reasonable conditions, the Purchaser may rescind the contract or reduce the remuneration pursuant to the applicable statutory provisions.

b) The Supplier's liability to pay damages is governed by Article XI.

c) The above obligations of the Supplier shall apply only if the Purchaser (i) immediately notifies the Supplier of any such claim asserted by the third party in written form, (ii) does not concede the existence of an infringement and (iii) leaves any protective measures and settlement negotiations to the Supplier's discretion. If the Purchaser stops using the Supplies in order to reduce the damage or for other good reason, it shall be obliged to point out to the third party that no acknowledgement of the alleged infringement may be inferred from the fact that the use has been discontinued.

2. Claims of the Purchaser shall be excluded if it is responsible for the infringement of an IPR.

3. Claims of the Purchaser are also excluded if the infringement of the IPR is caused by specifications made by the Purchaser, by a type of use not foreseeable by the Supplier or by the Supplies being modified by the Purchaser or being used together with products not provided by the Supplier.

4. In addition, with respect to claims by the Purchaser pursuant to No. 1 a) above, Article VIII Nos. 4, 5, and 9 shall apply mutatis mutandis in the event of an infringement of an IPR.

5. Where other defects in title occur, Article VIII shall apply mutatis mutandis.

6. Any other claims of the Purchaser against the Supplier or its agents or any such claims exceeding the claims provided for in this Article IX, based on a defect in title, are excluded.

X. Impossiblity of performance; adaption of contract

1. To the extent that delivery is impossible, the Purchaser is entitled to claim damages, unless the Supplier is not responsible for the impossibility. The Purchaser's claim for damages is, however, limited to an amount of 10 % of the value of the part of the Supplies which, owing to the impossibility, cannot be put to the intended use. This limitation shall not apply in the case of mandatory liability based on intent, gross negligence or loss of life, bodily injury or damage to health; this does not imply a change in the burden of proof to the detriment of the Purchaser. The Purchaser's right to rescind the contract shall be unaffected.

2. Where unforeseeable events within the meaning of Article IV No. 2 substantially change the economic importance or the contents of the Supplies or considerably affect the Supplier's business, the contract shall be adapted taking into account the principles of reasonableness and good faith. To the extent this is not justifiable for economic reasons, the Supplier shall have the right to rescind the contract. If the Supplier intends to exercise its right to rescind the contract, it shall notify the Purchaser thereof without undue delay after having realized the repercussions of the event; this shall also apply even where an extension of the delivery period has previously been agreed with the Purchaser.

XI. Other claims for damages; statute of limitations

1. The Purchaser has no claim for damages based on whatever legal reason, including infringement of duties arising in connection with the contract or tort.

2. The above shall not apply in the case of mandatory liability, e. g. under the German Product Liability Act ("Produkthaftungsgesetz"), in the case of intent, gross negligence, loss of life, bodily injury or damage to health, or breach of a condition which goes to the root of the contract ("wesentliche Vertragspflichten"). However, claims for damages arising from a breach of a condition which goes to the root of the contract shall be limited to the foreseeable damage which is intrinsic to the contract, unless caused by intent or gross negligence or based on liability for loss of life, bodily injury or damage to health. The above provision does not imply a change in the burden of proof to the detriment of the Purchaser.

3. To the extent that the Purchaser has a claim for damages, it shall be timebarred upon expiration of the statute of limitations pursuant to Article VIII No. 2. The same shall apply to the Purchauser's claims in connection with actions undertaken to avoid any damage (e. g. callback). In the case of claims for damages under the German Product Liability Act, the statutory statute of limitations shall apply.

XII. Venue and applicable law

1. If the Purchaser is a businessman, sole venue for all disputes arising directly or indirectly out of the contract shall be the Supplier's place of business. However, the Supplier may also bring an action at the Purchaser's place of business.

2. Legal relations existing in connection with this contract shall be governed by German substantive law, to the exclusion of the United Nations Convention on contracts for the International Sale of Goods (CISG).

XIII. Severability clause

The legal invalidity of one or more provisions of this Agreement in no way affects the validity of the remaining provisions. This shall not apply if it would be unreasonable for one of the parties to be obligated to continue the contract.

– as of June 2005 –

Practical, informative, comprehensive
Solution and application brochures

No doubt technical data is important. However, which products are best suited for a particular application? In our brochures, you will find many practical solutions and important background knowledge all around the efficient and convenient building control, apart from the numerous product advantages.

We would also be pleased to send you our brochure free of charge by mail to your home. The order form can be found at www.theben.de/katalog





Cleverly automated
KNX home and building automation

What is KNX? What can it be used for? When does it make sense to use the fieldbus? These and many other questions are answered on about 90 pages of our new KNX solutions brochure: simple, comprehensive, and nicely illustrated. Various practical application examples demonstrate the advantages of a KNX building system control, show how it functions and why.

Download the brochure as a PDF:
www.theben.de/en/knx-bro-en

Illuminating and versatile
Presence and motion detectors

When do I use a presence detector? When do I use a motion detector? And what exactly is the difference? On about 80 pages, our solution brochure presents a selection of the most common applications of presence and motion detectors. Furthermore, graphics illustrate what has to be kept in mind when placing the detectors in each individual situation, in order to reduce equipment costs.

Download the brochure as a PDF:
www.theben.de/en/pir-bro-en

Practical, informative, comprehensive
Solution and application brochures





Reliable switching and dimming
LED-compatible solutions

LEDs have made their career over the past years. There is hardly any area of lighting technology, where they are not present. However, not every bulb can easily be replaced by an LED retrofit lamp. The reason for this, and how you can reliably switch and dim LEDs with our products, is explained in our LED brochure.

Download the brochure as a PDF:
www.theben.de/en/led-bro-en

Convenient, quick, safe
KNX visualisation theServa

Smartphones and tablet PCs are a constant part of our daily life. With our KNX visualisation theServa S110, you can make easy adjustments to light, sun protection and climate settings via app and access important usage data. All advantages and functions of our KNX visualisation you will find in our brochure.

Download the brochure as a PDF:
www.theben.de/en/theserva-bro-en

Theben AG Worldwide
Headquarter – Theben Group Companies

Headquarter

Theben AG
Hohenbergstr. 32
D-72401 Haigerloch, GERMANY
Phone +49 7474 692-0
Fax +49 7474 692-150
info@theben.de
www.theben.de

Theben Group Companies

FRANCE
Theben S.A.R.L.
ZAC de la Madeleine
15 Rue de la Tuilerie
77500 Chelles
Phone +33 1 82770100
Fax +33 1 60200083
theben@theben.fr
www.theben.fr

GREAT BRITAIN
Timeguard Ltd
Victory Park, 400 Edgware Road
London NW2 6ND
Phone +44 208 4508944
Fax +44 208 4525143
csc@timeguard.com
www.timeguard.com

ITALY
Theben S.R.L.
Via Simone de Gatti, 3
20091 Bresso (Mi)
Phone +39 02 66505083
Fax +39 02 66505397
info@theben.it
www.theben.it

NETHERLANDS
Theben Nederland
Laan van de Leeuw 34
7324 BD Apeldoorn
Phone +31 55 2020000
Fax +31 55 2020001
nederland@theben.de
www.theben.de/nl

SINGAPORE
Theben Asia Pte Ltd
25 International Business Park,
German Center #05-00
609916 Singapore
Phone +65 6560 3464-5
Fax +65 6560 5929
info@theben-asia.com
www.theben.asia

SWITZERLAND
Theben HTS AG
Im Langhag 7b
8307 Effretikon, SWITZERLAND
Phone +41 52 355 1700
Fax +41 52 355 1701
info@theben-hts.ch
www.theben-hts.ch

Theben Worldwide
Worldwide Agencies

ARGENTINA
Hertig S.A.
Bolivar 1335
C1141AAD Ciudad de Buenos Aires
Phone +54 11 43617136
ventas@hertig.com.ar
www.hertig.com.ar

AUSTRIA
Siblik Elektrik Ges.M.B.H. & Co.KG
Murbangasse 6
1108 Wien
Phone +43 1 680060
info@siblik.com
www.siblik.com

AUSTRALIA
TCA Time Control Australia
P.O. Box 2086
2210 Peakhurst NSW
Phone +61 2 9153 5480
jamesw@tcacorp.com.au
www.tcacorp.com.au

BELGIUM
Tempolec S.A.
Route de Biesme 49
6530 Thuin
Phone +32 71 590039
info@tempolec.be
www.tempolec.be

CANADA
Davis Controls Ltd.
2200 Bristol Circle
Oakville Ontario L6H 5R3
Phone +1 905 8292000
info@daviscontrols.com
www.daviscontrols.com

CHILE
Scharfstein SA
Av. Sta. Maria 0510
Providencia, Santiago
Phone +56 2 550 0000
scharfstein@scharfstein.cl
www.scharfstein.cl

CHINA / HONG KONG
Friends Environmental Material
Room906A, Kin Tak Fung
Industrial Centre, Wai Yip Street 174
Kwun Tong Kln, Hong Kong
Phone +852 29519710
allenli62@hotmail.com

CROATIA
Intendo D.O.O.
Jurja Dobrile 18
51000 Rijeka
Phone +385 51624776
www.intendo-doo.hr

CYPRUS
Pambos Nicolaou & Son Ltd.
Kimonos 6 Str., Tseri
2480 Nicosia
Phone +35 22 38 03 77
nicha@cytanet.com.cy

CZECH REPUBLIC
Elektro-System-Technik
Spol. S. R. O.
Pod Pekarnami 338/12
19000 Praha 9
Phone +42 266 090711
est@est-praha.cz
www.est-praha.cz

DENMARK
Gycom Danmark A/S
Ølby Center 5,1.sal
4600 Køge
Phone +45 56 26 66 35
sales.dk@gycom.com
www.gycom.com

EGYPT
Cairo Electrical Group
Garden City
9, Rostroum Str. Apt. 37
11516 Maglis El Shaab Cairo
Phone +202 2796 1337
celeg@link.com.eg

ESTONIA
Vallin Baltic As
Mäepealse 2, 12618 Tallinn
Phone +372 6593200
info@vallin.ee
www.vallin.ee

FINLAND
Gycom Finland Oy
Larin Kyöstin tie 4, 00650 Helsinki
Phone +358 9 25252100
myynti.palvelu@gycom.com
www.gycom.com

GREECE
V. KAFKAS S.A.
Electrical Materials & Lighting
1st km Markopoulou Ave.
190 02 Peania
Phone +30 216 3003000
info@kafkas.gr
www.kafkas.gr

HUNGARY
Elektro Kamleithner Kft
Jokai utca 32, fszt 4
1195 Budapest
Phone +361 4253288
info@theben.hu
www.theben.hu

ICELAND
Reykjafell Ltd.
Skipholti 35, 105 Reykjavik
Phone +354 588 60 00
reykjafell@reykjafell.is
www.reykjafell.is

INDIA
Cape Electric Private Limited
A-41 (B), SIPCOT Industrial
Growth Centre,
Oragadam, Sriperumbudur Taluk,
Kancheepuram Dist., Tamil Nadu -
602 105
Phone +91 44 37477000
chennai@capeindia.net
www.capeindia.net

INDONESIA
PT Guna Era Distribusi
Jl. Rawa Gelam Ii No. 8
Kawasan Industrian Pulogadung
Jakarta Timur 13930
Phone +62 21 46825050
C-Service@ged-gae.co.id
www.gae.co.id

IRAN
S. G. Riazi Trading
#4. No. 29 Parasto. Str
St. Valiasr Ave., 15929 Tehran
Phone +98 21 888 903 40
info@sgrtrading.net
www.sgrtrading.net

IRELAND
Inter-Konnect
Dublin Industrial Estate Glasnevin
90/04 Lagan Road, Dublin 11
Phone +353 1 830 4666
info@interk.ie
www.interkonnect.ie

ISRAEL
Galoz Electronics Ltd.
Galoz Building; 7, Hameretz Street
Rosh Ha'Ayin 4801707
Phone +972 3 9023456
sales@galoz.co.il
www.galoz.co.il

JORDAN
Noor Ala Noor Est.
214 Gardens Street - Khilda
11192 Amman
Phone +962 65332410
hothyfa@nooralanoor.net
www.nooralanor.net

KOREA
MEC Systech Co., LTD.
Bisan 2dong, 576-8
Anyang City, Kyunggki-do, Korea
Phone +82 2 2194 3339
yskim@hanmec.co.kr
www.mec.co.kr

LATVIA
Vallin Baltic Sia
Maskavas Str 322, 1063 Riga
Phone +371 6718 7204
info@vallin.lv
www.vallinbaltic.com

LEBANON
Garabed Ayanian + Sons
176 Gouraud Street, Beirut
Phone +961 1 255222
gasons@dm.net.lb

LIBYA
Bowabt Al-Magd (W.L.L)
aljraba Street, Tripoli
Phone +218 213 603240
eng.gelaw@gmail.com

LITHUANIA
Vallin Baltic
Pelesos str. 3, 02115 Vilnius
Phone +370 527 288 93
info@vallin.lt
www.vallinbaltic.com

LUXEMBOURG
Marco Zenner S. A. R. L.
Zone Industrielle Zare Est
4385 Ehlerange
Phone +352 44 15 44 1
contact@zenner.lu
www.zenner.lu

MALAYSIA
Electech Distribution Systems
16–1, Jalan 6/89 B, Batu 3 1/2,
Off Jalan Sungei Besi
57100 Kuala Lumpur
Phone +60 3 7981 8950
info@edsm.com.my
www.edsm.com.my

MONTENEGRO
Rarovac Komerc Podg.
Bracana Bracanovica 6, 81000 Podgorica
Phone +38 1 81609091
rarovackomerc@t-com.me

MOROCCO
General Technics
22 Rue Rahal Ben Ahmed
(Ex. Rue Dinant), 20300 Casablanca
Phone +212 5 22 246170
genetech@menara.ma

NEW ZEALAND
Vynco Industries (N.Z.) Ltd.
Po Box 9022, 8149 Christchurch
Phone +64 3 379 9283
walker@vynco.co.nz
www.vynco.co.nz

NORWAY
Gycom Norge As
Balder Allé 2, 2060 Gardermoen
Phone +47 22 64 55 25
gycom.no@gycom.com
www.gycom.com

OMAN
Stars Light L.L.C..
P.O. Box 2822, 112 Ruwi
Phone +968 697 025
starmail@omantel.net.om
www.starslightllc.com

POLAND
PPUH El-Team Sp. Z.O.O.
Al. Mlodych 26–28
41-106 Siemianowice
Phone +48 322 043 628
el-team@el-team.com.pl
www.el-team.com.pl

ROMANIA
Unilux International Srl
Bdul. Unirii 19, Bloc 4B
Sc. B, Etj. 3, Apt. 35, 040103 Bucuresti
Phone +4021 3177801
contact@uniluxinternational.ro
www.uniluxinternational.ro

PORTUGAL
Duarte Neves, Lda
Qta. Estrangeiros, Rua D 78
2665-601 Venda do Pinheiro
Phone +351 219 668100
info@duarteneves.pt
www.duarteneves.pt

RUSSIA
MARBEL
Bolshoi Prospect V.O. 55
199178 St. Petersburg
Phone + 7 812 3242777
sales-spb@marbel.ru
www.marbel.ru

SAUDI ARABIA
Anwar Al-Wessam Est.
Gurabi Bin Shaihon Center
P. O. Box 23521, Riyadh 11436
Phone +966 1 405 5942
info@al-wessam.com
www.al-wessam.com

SERBIA
SOBEL d.o.o.
Ustanicka 125-I
11000 Belgrad
Phone +381 11 3087 507
office@sobel.rs
www.sobel.rs

SINGAPORE
ITE Electric Systems Co. Pte. Ltd.
ITE Electric Building
1, Harrison Road 01-01,
Singapore 369652
Phone +65 6 285 2233
ite@ite.com.sg
www.ite.com.sg

SLOVENIA
MTS International d.o.o.
Perhavčeva ul. 15c, 2000 Maribor
Phone +386 26612001
mts.international@siol.net
www.mts.si

SLOVAKIA
Elektro-System-Technik, s.r.o.
Mnesická 11
91501 Nové Mesto nad Váhom
Phone +421 327740814
info@est-slovensko.sk
www.est-slovensko.sk

SOUTH AFRICA
Suparule Sa (Pty) Ltd
P.O. Box 76128, 2144 Wendywood
Phone +27 11 4529800
steve@suparule.co.za
www.suparule.co.za

SPAIN
Guijarro Hermanos S.L.
Polig. Ind. Virgen De
Butarque Isaac Peral 6
28914 Leganes (Madrid)
Phone +34 91 6870022
theben@guijarrohermanos.es
www.guijarrohermanos.es

SWEDEN
Gycom Nordic AB
Kanalvägen 10C, 8tr
19461 Upplands Väsby
Phone +46 10 122 17 00
info@gycom.se
www.gycom.com

SYRIA
Bouzo Co
Trading-Consulting
Damascus/Syria
Phone +963 11 3311306
bouzo_f@yahoo.com

TAIWAN
Canaan Electric Corp.
6F-5, No.63, Sec. 2
Chang An East Road
104 Taipei/Taiwan
Phone +886 2 25082331
sales@canaan-elec.com.tw
www.canaan-elec.com.tw

THAILAND
Technology Instruments Co Ltd
549/9 Onnut Rd.,
Pravet 208/132-137, Bangkok 10250
Phone +662 743 8888
ttic@inet.co.th
www.tic.co.th

TUNESIA
La Tuniso Francaise
d'Éclairage "Abel Afrique"
Zone Industrielle "Morize" BP 65
2090 MORNAG
Phone +216 79350955
tfe.abelafrique@topnet.tn
www.abelafrique.com

TURKEY
Gökhan Elektrik
Perpa Elektrokent Is Merkezi A
A Blok K.8 No. 692-694
80270 Okmeydaný/Ýstanbul
Phone +90 212 221 32 36
ufuk@gokhanelektrik.com.tr
www.gokhanelektrik.com.tr

UKRAINE
KVK-Electro, Ltd.
43 Kikvidze Str., 01103 Kyiv
Phone +380 44 4962883
info@kvk.kiev.ua
www.kvk-elektro.com.ua

UNITED ARAB EMIRATES
Bin Ham Electrical Equipment
P. O. Box 4301, Dubai
Phone +971 4 227 393 9
sales@binhameet.com
www.binhameet.com

USA
LUMENITE CONTROL
Techn Inc., 2331 North 17th. Av.
Franklin Park, Illinois 60131
Phone +1 847 4551450
customerservice@lumenite.com
www.lumenite.com

VIETNAM
Terramar Engineering & Machinery (Pte) Ltd.
123 Le Loi Boulevard District 1
Ho Chi Minh Vietnam
Phone: +848 3915 3209
www.terramar.com.vn
team-v@terramar.com

Theben Worldwide
ThebenHTS Agencies and KNX Partners

ThebenHTS Agencies

INDIA
Bhavana Lighting Pvt. Ltd.
1123rd Fl. Kakad Udyog Bhavan
Off Lady Jashedji Rd.
400016 Mahim Mumbai
Phone +91 22 2430 4111
sales@bellighting.net
www.bellighting.net

KNX-Partners

INDIA
Light & Magic Automation Pvt.
Shop No. 9-10-11, Ruby Apartment,
MV Road, Andheri East
Mumbai 400 069
Phone +91 22 2684 5454
mihir.shah@advancedindia.com
www.advancedindia.com

Venba Tech Pvt. Ltd.,
First Floor, Dilmas Swaure
No. 27 , 1st floor
Shafee Mohammed Road
Nungambakkam
Chennai 600006 India
Phone: +91 44 2829 0898
www.venbatech.com
consult@venbatech.com

MALAYSIA
A & S Building Tech Sdn Bhd
45-4, Jalan PJU 1/37
Block G , Dataran Prima,Petaling
Jaya
47301, Selangor Darul Ehsan
Malaysia
Phone: + 603 7780 2710
www.asbtsb.com.my
asbtsb@streamyx.com

Seikou Systec Sdn Bhd
Jln 9/125D, Desa Petaling No 16-2
57100 Taman Desa Petaling
Kuala Lumpur
Malaysia
Phone: + 603 9057 7793
pw_siew@yahoo.com

NEW ZEALAND
Ivory Egg (NZ) Ltd.
14 Mount Pleasant Avenue
7010 Beachville, Nelson
Phone +64 22 3207665
colin@ivoryegg.co.nz
www.ivoryegg.co.nz

Vynco Industries (NZ) Ltd
50 Walls Road, Penrose,
Auckland
1061 New Zealand
Phone: +64 9 525 6051
www.vynco.co.nz
vyncoauck@vynco.co.nz

NORWAY
Instell AS
Gjerdrumsvei 16, 0484 Oslo
Phone +47 22 021450
instell@instell.no
www.instell.no

SINGAPORE
Sunlight Electrical PTE LTD
1 Third Chin Bee Road
Singapore 618679
Phone +65 6 741 9055
candy.chan@sunlightgroup.com

THAILAND
Ibuilt Automation Co., Ltd.
44, 44/1 Rungsiya Village
Ramintra 64,Kannayao Bangkhen,
Bangkok 10230
Phone +66 2 918 05613
patomporn@ibuilt.co.th
www.ibuilt.co.th

TURKEY
EMES Elektromekanik
Sis. San.ve Tic.Ltd.Sti.
Cetin Emec Blv.No: 54/6-12
06520 Balgat-Ankara
Phone +90 312 287 30 80
www.emesltd.com
emesltd@emesltd.com

UNITED ARAB EMIRATES
Greentec Automation DMCC
Unit No: 2005, SABA Tower 1
P.O.Box 346075
DUBAI
Phone +971 4551 6092
info@greentec-automation.com
www.greentec-automation.com

Theben is member of:

theben

Theben AG
72401 Haigerloch | Germany
Phone +49 7474 692-0
Fax +49 7474 692-150
info@theben.de | www.theben.de

Service Hotline
hotline@theben.de
+49 7474 692-369
Monday to Thursday 7.00 am to 6.00 pm,
Fr 7.00 am to 4.00 pm

4 003468 990124
9900600 0616
We reserve the right to make technical modifications and improvements.

