

Presence detector

PlanoCentro 000-A-230V

PlanoCentro 000-E . .

PlanoCentro 000-U . .

Art. Nr.

204 0 . . .

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Presence detector**PlanoCentro 000-A-230V****PlanoCentro 000-E . .****PlanoCentro 000-U . .****Table of contents**

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Thank you for purchasing a Theben HTS presence detector and putting your trust in us.

1. Safety



CAUTION!

Danger of death through electric shock or fire!

Installation should only be carried out by a qualified electrician!

Work done on electrical installations may only be conducted by an authorised electrician or trained persons under the supervision and charge of an authorised electrician according to electrotechnical regulations!

Observe country-specific safety guidelines for working on electric installations! **The voltage supply must be disconnected before installation!**



CAUTION!

The device is maintenance-free. The warranty terminates if the device is opened or entered with any kind of object.

1.1 Designated use

The presence detector is intended for indoor installation.

The presence detector is solely intended for the purpose contractually specified between the manufacturer and the user. Any other or extended use has to be regarded as not complying with the designated use. The manufacturer is not liable for any resulting damage. Radio frequency has to be followed.

2. Function and performance

The presence detector series PlanoCentro is intended for ceiling mounting.

- Installation in suspended ceilings (false ceilings)
- Installation in flush-mounted junction box (set into concrete ceiling)

Devices are available in the delivery unit with matching assembly sets for ceiling installation and flush-mount ceiling installation.

The presence detector PlanoCentro 000 (Slave) serves to extend the detection area in combination with a master device such as PlanoCentro 101. By relaying the presence signal the PlanoCentro 000 helps with the comfortable and energy-efficient control of lighting, HVAC and shading. The area of preferred use includes large spaces such as offices and classrooms.

- Detection range up to 100m² moving and 64m² seated persons at 3.5 m installation height
- Adjustable sensitivity

The PlanoCentro 000 has an output for parallel connection.

Helpful functions are available for start up and subsequent maintenance support.

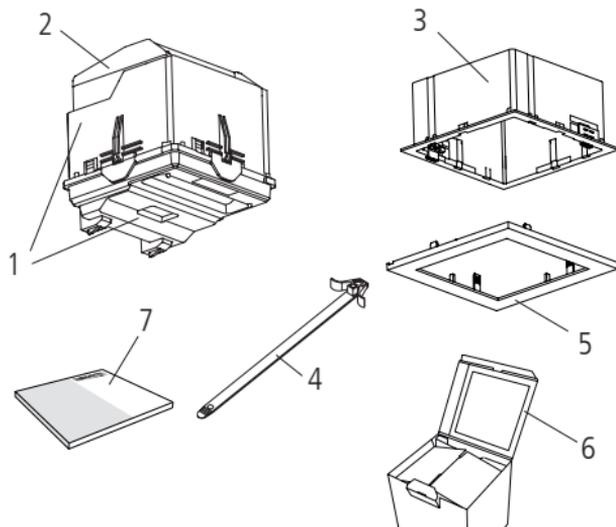
- Data read-out (parameters, diagnostic and statistical data)
- Diagnostic functions

The presence detector can send configuration and diagnostic information to the SendoPro Management remote control via radio transmission (868MHz). Commands from the SendoClic remote control cannot be processed.

2.1 Scope of delivery

Ceiling installation

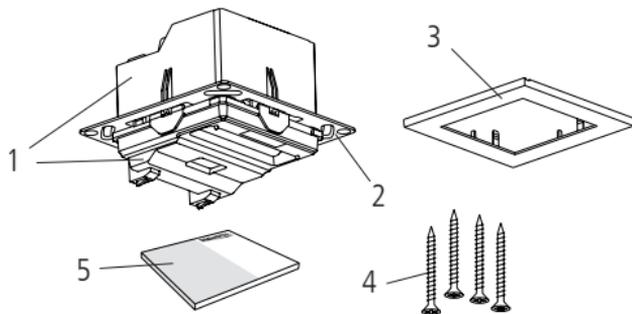
- 1 Presence detector with installation protection cover (removable)
- 2 PlanoCap (terminal cover)
- 3 PlanoFix E (installation frame)
- 4 Strap, 6 pieces
- 5 PlanoCover (frame)
- 6 Template for ceiling cut out
- 7 Assembly instruction



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Flush-mounted installation

- 1 Presence detector with installation protection cover (removable)
- 2 PlanoFix U (installation plate)
- 3 PlanoCover (frame)
- 4 4 screws
- 5 Assembly instruction



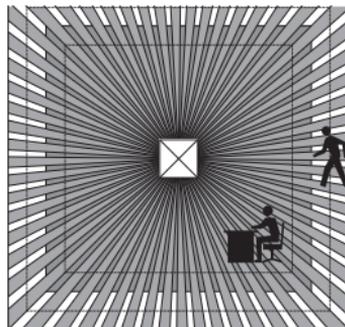
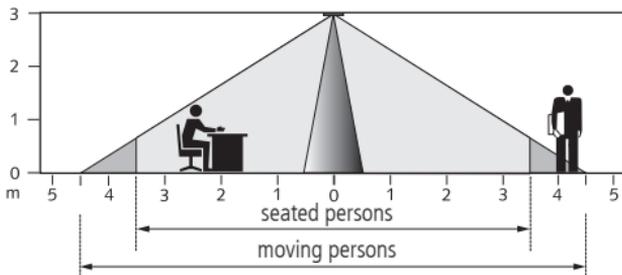
3. Installation

3.1 Presence detection

The ideal installation height is between 2.0 - 3.5 m. The sensitivity of the detector reduces with higher installation heights. The presence detector requires a clear view of people in order to clearly detect people. Offices, mobile partition walls, plants, hanging lighting etc. can hinder (shadowing) the presence detector.

install. height	seated persons		moving persons	
2.0 m	20 m ²	4,5m x 4,5m	36 m ²	6,0m x 6,0m ± 0.5m
2.5 m	36 m ²	6,0m x 6,0m	64 m ²	8,0m x 8,0m ± 0.5m
3.0 m	49 m ²	7,0m x 7,0m	81 m ²	9,0m x 9,0m ± 1.0m
3.5 m	64 m ²	8,0m x 8,0m	100 m ²	10,0m x 10,0m ± 1.0m

Detection range (installation height 3.0m)



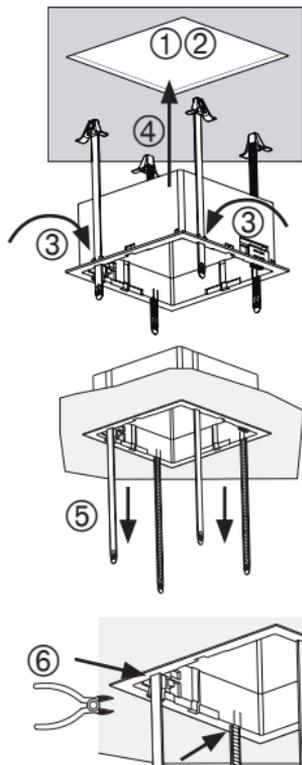
3.2 Ceiling installation

Ceiling installation of the presence detector takes place via the PlanoFix E installation frame and straps in the cut out ceiling element.

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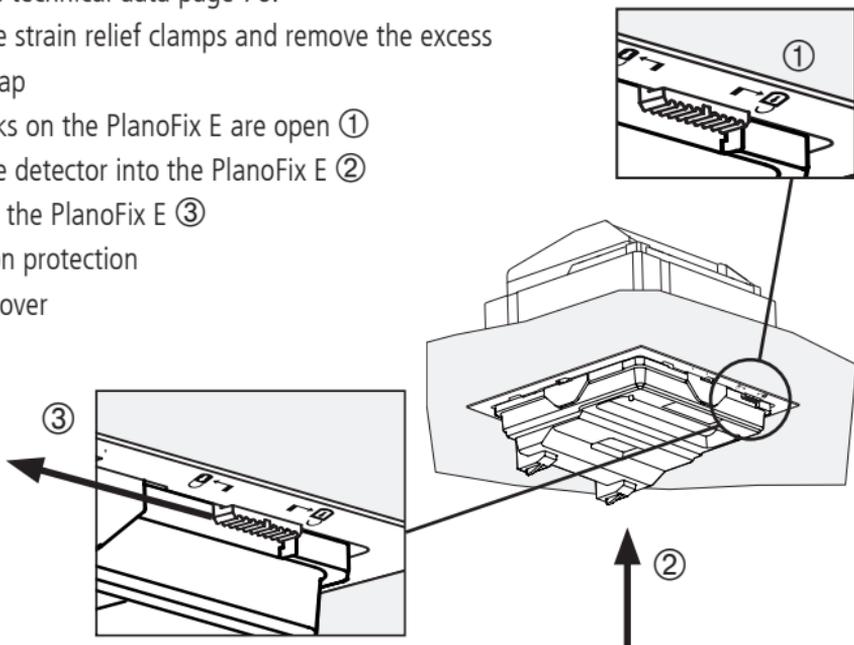
PlanoFix E installation frame

1. Draw ceiling cut out ①
(A hinge is integrated into the top of the packaging)
2. Cut out the drawn form according to the materials with suitable tools, 100 x 100 mm \pm 1mm ②
3. Insert 4 straps into the PlanoFix E ③
4. Insert the PlanoFix E into the ceiling cut out with the straps ④
5. By pulling on the straps and pushing against the PlanoFix E, the PlanoFix E is snapped securely into the ceiling element. ⑤
6. Cut the ends of the 4 straps ⑥



Monitoring the presence detector

1. Connect wires, see technical data page 76.
2. Fasten cable to the strain relief clamps and remove the excess
3. Fasten the PlanoCap
4. Make sure the locks on the PlanoFix E are open ①
5. Insert the presence detector into the PlanoFix E ②
6. Close the locks on the PlanoFix E ③
7. Remove installation protection
8. Attach the PlanoCover



The technical data is to be followed during assembly and installation.
See page 78 and following.

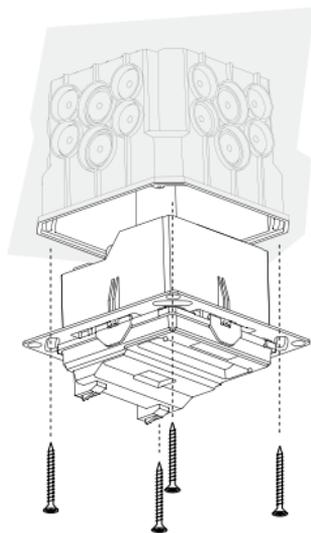
3.3 Flush-mounted ceiling installation

Flush-mounted ceiling installation of the presence detector takes place via PlanoFix U in a flush mounted socket. Details about the flush mounted socket can be found in the technical data page 78, section flush mount installation. The screws included are intended for installation in the flush-mounted socket. Suitable pan head screws are to be used for the installation of other materials.

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Install presence detector with PlanoFix U

1. Connect wires, see technical data page 78.
2. Insert the presence detector into the flush-mounted junction box (check the wire progression)
3. Screw the PlanoFix U metal plate tightly to the flush-mounted junction box
4. Remove installation protection
5. Attach the PlanoCover



4. Connection / Operation mode

The presence detector PlanoCentro 000 can be used in combination with a master device such as PlanoCentro 101 to implement parallel connections.

- Master - slave parallel switching

4.1 General parallel connecting

The parallel signal is sent via P-terminal and also received. Every detector, regardless of whether it is master or slave, sends the presence signal via P-terminal. This enables a Master and Slaves to be connected together with a parallel signal. See following chapter with parallel connecting variations.

- The parallel signal is compatible with the compact range.

Parallel signal response

Room monitoring	Information about room monitoring is also transmitted with the parallel signal.
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CAUTION!

Power supply:

Detectors linked to one another via the parallel signal have to be connected to the same phase.

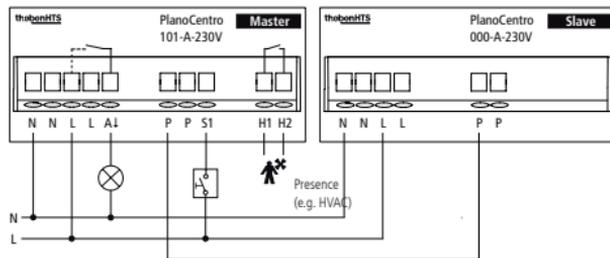
4.2 Master-Slave parallel circuit operation

Several detectors switch one lighting group

- The Master switches the lighting. All other detectors are slaves.
- Presence detection through all detectors together.
- Light measurement only with master.
- Setting parameters on the Master. Detection sensitivity can also be set on the Slave.
- Maximum of 10 detectors can be connected in parallel.
- Use the same phase for all detectors.

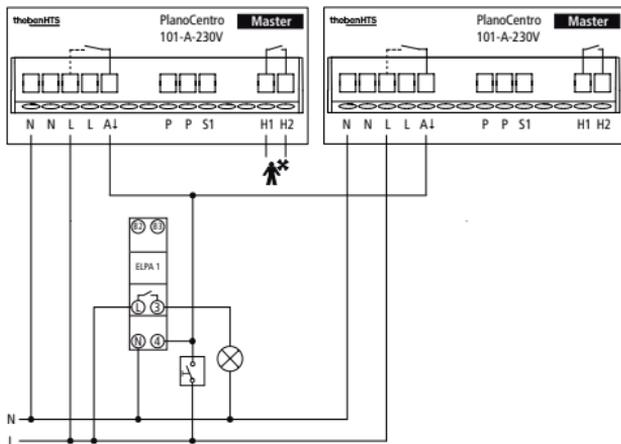
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Master: PlanoCentro 101-A-230V
Slave: PlanoCentro 000-A-230V



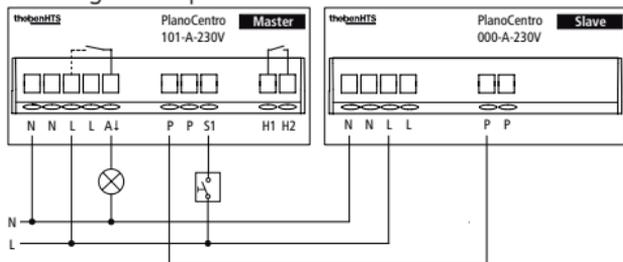
4.3 Parallel circuit operation with external staircase lightning timer

- Master switches lighting directly.
- Master checks the brightness.
- Use the SendoPro to set the lighting time delay for channel A light at the Master to impulse.
- Use the same phase for all devices.
- Staircase time switch e.g. Theben ELPA 1



4.4 Detector as staircase lightning timer

- Master switched direct lighting.
- The staircase function «On» prevents switching off via push-button.
- Push-button activates channel A light
- If necessary, parallel switch additional slaves via P-terminal.
- Set parameter value only with master.



5. Start-up

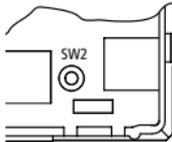
The detector is delivered ready for operation with basic settings. The specifications are guide values. The management remote control SendoPro is available as an option for start-up. It enables remote setting of all parameter values. See chapter 6 page 71.

5.1 Basic settings

Parameter	Value
Detection sensitivity (PIR)	3
Reduction of detection sensitivity when monitoring	2

5.2 Activating the basic settings

The basic settings can be activated as follows.

Activation	Description	
SW2 (3 sec)	The SW2 button can be pressed and held down for 3 seconds to revert back to the basic settings. The presence detector restarts at this point.	
SendoPro	The basic settings can be adopted with the SendoPro Management remote control command.	

5.3 Behaviour on switching on

Every time the voltage is switched on, the detector goes through the start-up phase, which is indicated by the LED. The presence detector runs through several tests during the start-up phase. If the tests run without any problems, then the presence detector switched to normal operation mode. If there is a problem (LED blinks rapidly), the light is switched on and does not switch off.

1. Start-up phase (30 seconds)

- LED blinks in second intervals.
- Parallel output is active
- Parameter adjustment is possible (active after start up phase has run)
- Test mode can be activated.

2. Operation mode normal

- The detector is ready for operation (LED off)

3. Event of malfunction

- LED flashes rapidly
- The light is switched on and does not switch off as long as there is a malfunction
- Troubleshooting see page 77

6. Parameters

The basic settings can be adjusted and optimised using the SendoPro management remote control. The following parameters are available with the PlanoCentro 000-A-230V:

Parameter		Page
Operation mode	Normal / test presence / test light	71
Detection sensitivity (PIR)	Value range in increments	72
Reduction of detection sensitivity when monitoring	Value range in increments	72

6.1 Adjustment with the remote control

Parameters are sent to the presence detector via infrared with the SendoPro. The parameters can be read-out before changes take place. Changed parameters are immediately accepted and applied by the detector.

LED	Description
Flickering during 3 sec	After pressing the send function on the management remote control, the presence detector displays correct receiving by flickering for 3 sec
lights up shortly	The command/parameter sent from the management remote control via infrared is rejected by the presence detector. The command is not valid. Check the selected detector type and the sent parameters.

6.2 Operation mode

The PlanoCentro has 3 operation modes

- Normal
- Test presence (page 73)

6.3 Detection sensitivity

The detector has 5 sensitivity levels. The basic setting is the middle level (3). A level can be selected with the SendoPro management remote control.

By selecting the operation mode test presence, the set sensitivity level is not changed.

The parameter can be changed during test presence.

Level	Sensitivity
1	less sensitive
2	Interim value
3	Standard
4	Interim value
5	very sensitive

6.4 Reducing sensitivity with room monitoring

In order to prevent false alarms, the sensitivity is reduced in levels relative to the base detection sensitivity.

Level	Reduction
1	less
2	Standard
3	intense

7. Read-out data

By means of the SendoPro management remote control the diagnostic and statistical data can be read-out.

Additional information can be found in the SendoPro operation manual.

8. Test-Mode

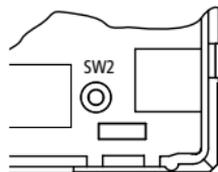
The PlanoCentro has a test mode.

- Test presence, page 73

The test mode can only be started with voltage supply.

8.1 Test presence

The test presence serves to test presence detection and parallel switching. The test presence can activated directly on the presence detector (without power up) or with the SendoPro management remote control.



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Activate	<ul style="list-style-type: none">- Push-button SW2; short button push 1x- "Test presence on" with the SendoPro management remote control The test mode presence can always be activated.
Terminate	With subsequent restart: <ul style="list-style-type: none">- Repress SW2 ends operation mode and restarts the detector.- Command "Test presence off" with the SendoPro management remote control- Power outage and thus power up- The detector automatically restarts after 10 minutes (see page 70)

LED display	Description
On	On detection of movement.
Off	With insufficient movement or absence.

Test response

- The parallel signal is transmitted via the P-terminal.
- Room monitoring responds normally as in normal mode.

Commands and adjustable parameters

During test mode the following commands are possible with the SendoPro management remote control:

- Terminate test presence
- Activate basic settings (Reset)
- Change detection sensitivity
- Change reducing sensitivity with room monitoring

The selected detection sensitivity (1 .. 5), see page 72, is not changed with the test presence activation. Sensitivity can be adjusted during the test.

The presence detector resets after test mode has terminated.

9. Control commands

Control commands are available as follows:

Test presence	See chapter 8.1 page 73
Restart	The detector restarts. Setting values are retained.
Restore basic settings	Set settings and configuration to factory settings.

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10. Diagnostics

10.1 Status information

Diagnostic and statistic information can be read-out by the SendoPro management remote control. Further information is available in the SendoPro operating instructions.

10.2 Malfunction information

Malfunction information can be read with the SendoPro management remote control.

Error display	Solution
Hardware malfunction	Send in device for repairs with a short description of the problem to the responsible specialised dealer.
Parameter error	Change and send parameter set
P-terminal overload	Fix parallel switching wiring malfunction

10.3 Diagnostic values

The values can be reset using the SendoPro management remote control.

	Value	Description
Diagnostic	Number of parallel signals	Counts incoming parallel signals.

11. Troubleshooting

Fault	Cause
Malfunction blinking (4x per second)	Malfunction during start-up phase or during operation; device is not fully functional! Press reset, if the malfunction blinking remains, prompt a diagnostic, see page 76.

11.1 LED display

LED	Description
Blinking in 1 second tact	The presence detector is in the start-up phase. See page 70.
Flickering during 3 sec	The command sent from the management remote via infrared is rejected by the presence detector.
lights up shortly	The command sent from the management remote via infrared is rejected by the presence detector. The command is not valid. Check the detector type selected in the SendoPro.
Fast blinking	Error blinking; The presence detector has found an error. See page 77
Lights or flickers irregularly	The presence detector is in test presence see page 73. The LED displays detection of movement.

12. Technical data

Presence detector	PlanoCentro 000-A-230V
Detection angle	horizontal / vertical 360°
Recommended installation height	2 - 3.5m
Detection range	3.5m installation height 64 m ² (8 x 8 m) seated persons 100 m ² (10 x 10 m) moving
Mains voltage	230V ±10%
Frequency	50Hz
Power consumption	approx. 0.3W
Parallel switching, max. number of presence detectors	10
Connection type	Screwless terminals, 1x 2.5mm ²
Strip length	10 - 11mm
Receiving	communication data
	sending data
Ambient temperature	0° - +50°C
Storage temperature	-25° - +60°C
Protection rating	IP 20 IP 40 (when fitted)

Ceiling installation (false ceilings)	
Installation type	PlanoFix E installation frame
Ceiling cut out	100 x 100 mm ± 1 mm
Ceiling strength	up to approx. 26 mm
Flush-mounted installation (concrete ceiling)	
Installation type	PlanoFix U , flush-mounted junction box
Flush-mounted junction box, Agro/Kaiser	115 x 115 x 100 mm, 9908.01/1298-07
PlanoFix U (installation plate)	Metal 118 x 118 mm

CE declaration of conformity

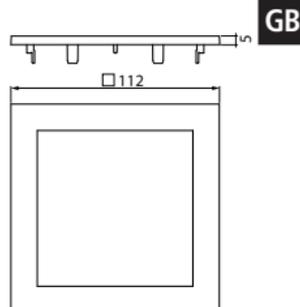
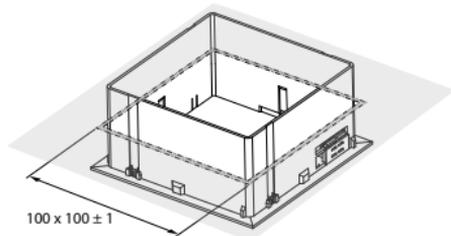
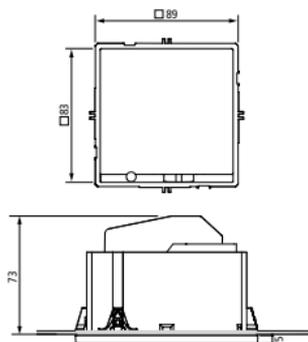
It conforms to the EMC Directive 2014/30/EU and Directive 2014/35/EU



Item numbers	
PlanoCentro 000-EWH, Installation set, white	204 0 102
PlanoCentro 000-EBK, Installation set, black	204 0 103
PlanoCentro 000-ESR, Installation set, silver	204 0 104
PlanoCentro 000-UWH, flush-mounted installation set, white	204 0 202
PlanoCentro 000-UBK, flush-mounted installation set, black	204 0 203
PlanoCentro 000-USR, flush-mounted installation set, silver	204 0 204
PlanoCentro 000-A-230V (spare part)	204 0 000
Management remote control SendoPro 868-A	907 0 675
SendoClic user remote control	907 0 690
PlanoCover EWH-112x112, white	907 0 677
PlanoCover EBK-112x112 , black	907 0 678
PlanoCover ESR-112x112 , silver	907 0 679
PlanoCover UWH-123x123 , white	907 0 680
PlanoCover UBK-123x123 , black	907 0 681
PlanoCover USR-123x123 , silver	907 0 682

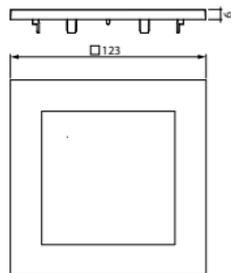
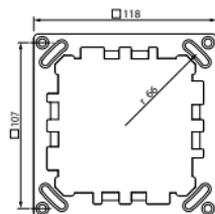
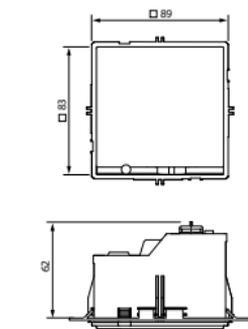
13. Dimension drawings

13.1 Ceiling installation PlanoCentro 000-E..



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13.2 Flush-mount installation PlanoCentro 000-U..



14. Warranty declaration

Theben HTS presence detectors are manufactured and tested for quality with greatest of care and most modern technology. Theben HTS AG thus guarantees smooth function with correct use. Should a malfunction appear, Theben HTS AG guarantees within the scope of the General Terms and Conditions:

Please notice specifically:

- that the warranty is valid for 24 months from date of manufacture.
- that the warranty becomes void if you or a third party makes modifications or repairs to the devices.
- that, as long as the presence detector is connected to a software controlled system, the warranty for this connection is only valid if the interface specifications are adhered to.

We are obligated to improve or replace as quickly as possible all damaged or unusable parts within the scope of delivery, proven insufficient materials, faulty construction or lacking models up to the end of the guarantee period.

Dispatching

For cases covered by the guarantee, send the device, together with the shipping order and a short description of the problem to the responsible specialised dealer.

Industrial property rights

Concept, as well as hard and software of this device are copyrighted.

Subject to alteration and printing errors.

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