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|----|----|---|
| I | DE | Einbauanleitung
Dezentrales Lüftungssystem
mit Wärmerückgewinnung
Typ e⁹⁰

- Bitte an den Nutzer weiterleiten - |
| II | EN | Installation Manual
Decentralised Ventilation System
with Heat Recovery
Type e⁹⁰

- Please pass on to user - |

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About this manual

- Read this manual carefully and completely before assembly. Always observe the general safety instructions and the safety symbols with information in the text.
- Hand out this manual to the user (tenants, proprietors, property management etc.) after completing assembly.

Symbols in this manual



This symbol warns you against risks of injury



This symbol warns you against risks of injury from electricity

Safety instructions



Caution! Any assembly work to the ventilation device may only be carried out after disconnecting all poles of the supply voltage. The ventilation device is fitted with protective insulation according to Protection Class II, a protective conductor connection is not required.



Attention! The electric connection may only be made by authorised qualified personnel and according to the applicable version of VDE 0100.



Attention! This device must not be operated by children and persons (filter replacement/cleaning) who are not able to operate the device safely due to their physical, sensory or mental abilities or their inexperience or lack of knowledge. Children should be supervised to ensure that they do not play with the device.

Technical data

Supply voltage:	230 VAC 50 Hz
Device voltage:	12 VDC SELV
Protection Class:	IP 22
Airflow volume:	5; 10; 15; 20 m³/h in reverse operation, 45 m³/h in exhaust air mode

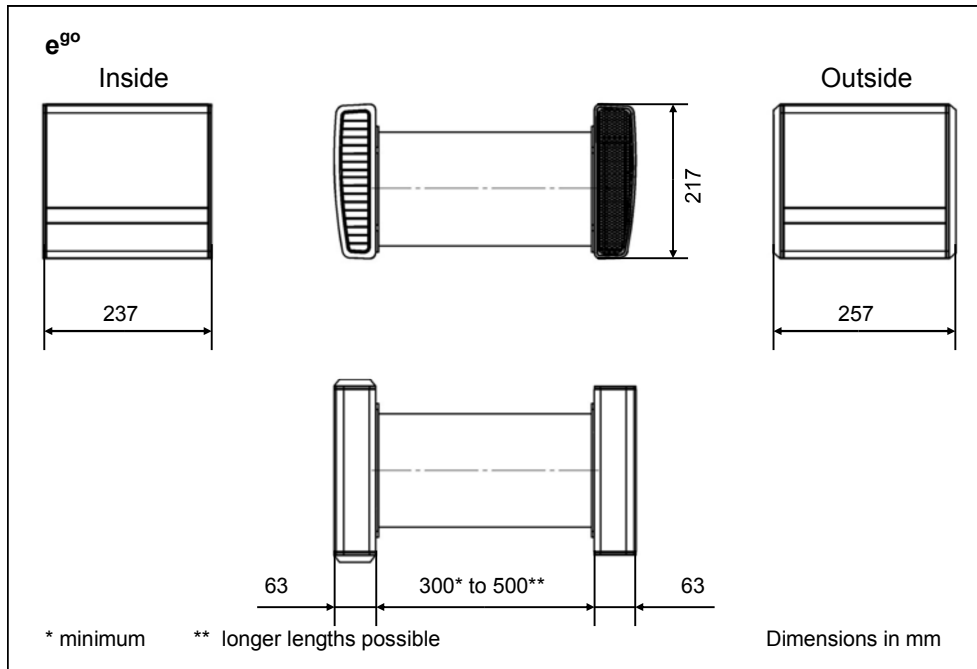
Disposal



The packaging must be sorted before disposal. If you wish to dispose of the ventilation device, observe the current regulations. The competent municipal authority will provide information.

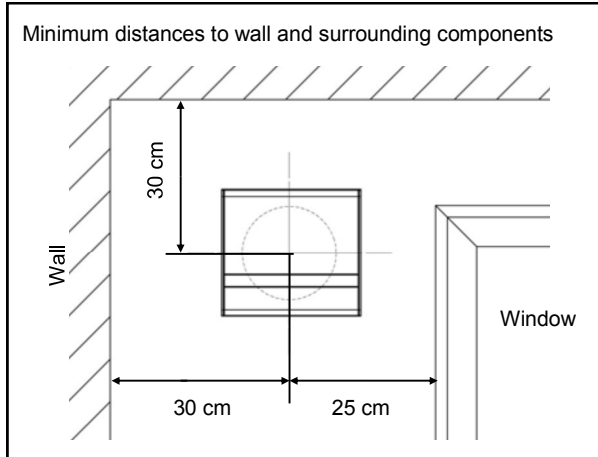
Dimension diagrams (all dimension in mm)

EN



Installation position

The two fans in the e⁹⁰ always operate in opposite directions thus providing supply and exhaust air simultaneously. Minimum distances to the wall and surrounding components must be observed to ensure unobstructed air flow without inadmissible mixing of supply and exhaust air!



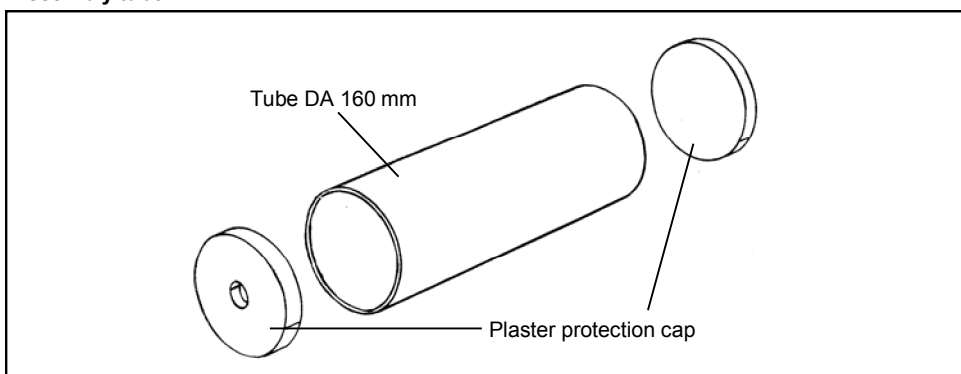
Range of application

Temperature range of application: - 15°C to + 40°C

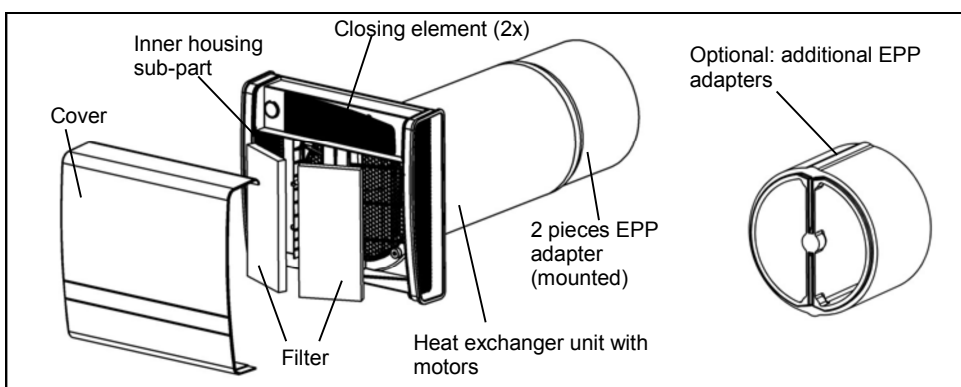
Can be used at a relative humidity up to 65% in the interior room area. Low formation of condensation during the heating period is possible. If the application limits are exceeded, switch off the device and close the inner screen. Ensure supply of fresh air via window ventilation.

Please check your delivery for completeness and mint condition!

Assembly tube

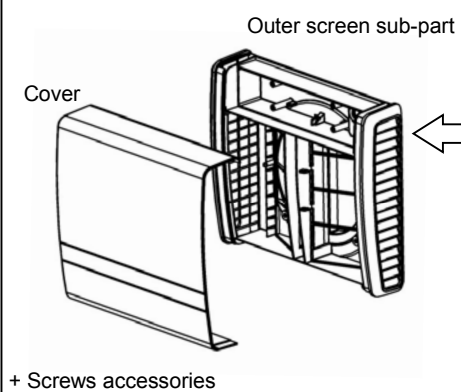


e⁹⁰ - insert

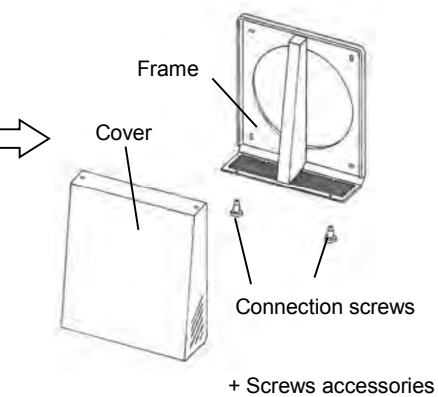


Outer screens

Outer screen, type 1/EGA
Order-No.: 040 019

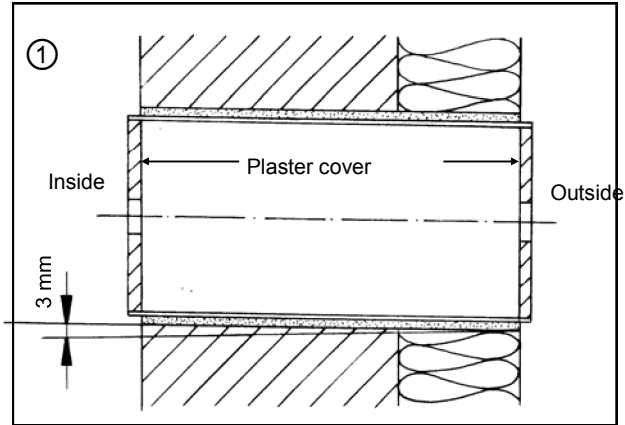


Weather protection hood, types:
1/HWE-2 white Order-No.: 040 107
1/HAZ-2 anthracite Order-No.: 040 108

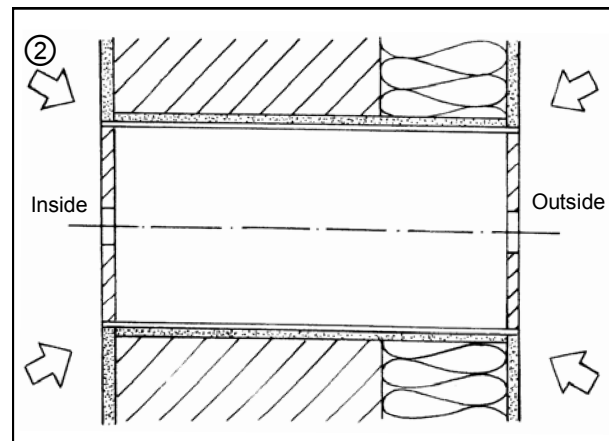


Prepare wall openings for the assembly tubes (e.g. via core drill hole, core bit Ø162 mm). If necessary, shorten the tube to the installation length required.

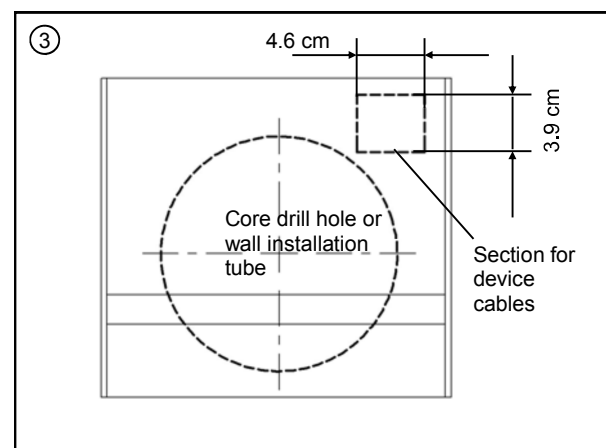
Make sure there is a slight projection of the tube on both sides to bridge the plaster thickness (after plastering, the tube must be flush with the plaster). Insert the tube and seal it all-round (Assembly adhesive Order No. 038 733).



Apply the inside and outside plaster.



Prepare the cable for the device connection in the designated section (e.g. J-Y (ST9Y4x2x0.8)). Cable length approx. 100 to 120 mm. Use the drilling template.



Safety instructions



Caution! Any assembly work to the ventilation device may only be carried out after disconnecting all poles of the supply voltage!

Make sure that the supply voltage of all connection lines is voltage-free (dead)! (Separation from the power supply with a minimum contact opening of 3 mm, e.g. electric fuse separating all poles).

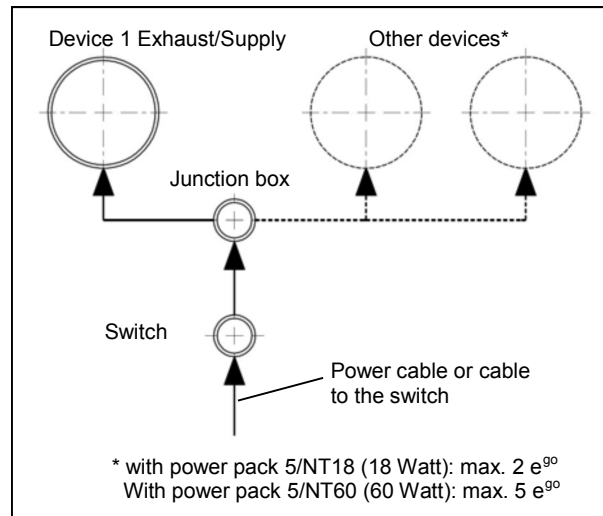
Each electric circuit of this ventilation system must be fitted with a residual current protection (e.g. FI switch/ RCCB)!



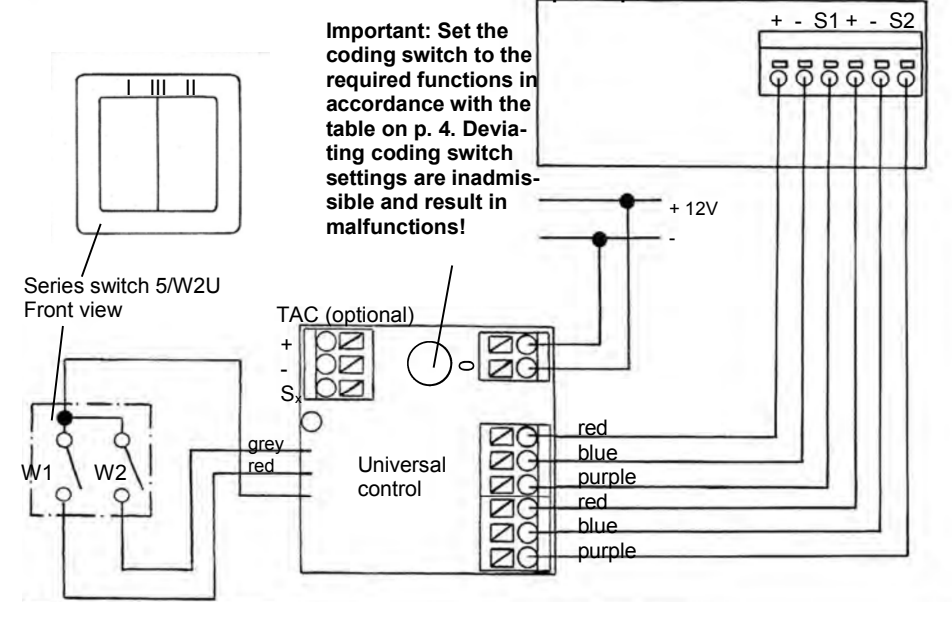
Electric connection only by a specialist!

Additional installations and electrical components in the ventilation unit are not allowed!

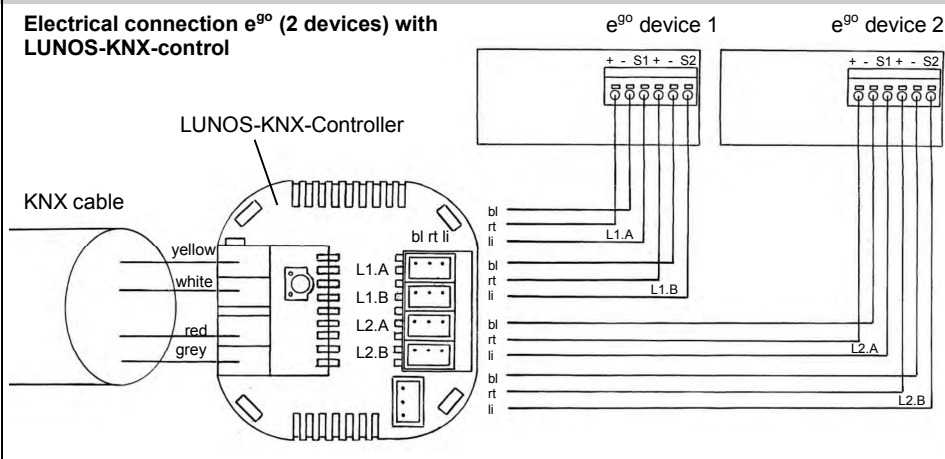
Triggering can be made via the universal control 5/UNI-FT and the comfort control TAC. The respective installation instructions apply accordingly. Select the position of the switch. Slit the cable channels. Connect the cable to the switch and locate the power pack under the switch e.g. 3x 1.5mm², otherwise a smaller cross-section suffices e.g. J-Y (ST)Y 4 x 2 x 0.8) and the cables to the devices (e.g. J-Y(ST)Y 4 x 2 x 0.8). Switching and switch are connected in accordance with the connection plan displayed below.



El. connection e⁹⁰ with control 5/UNI-FT and external power pack



Electrical connection e⁹⁰ (2 devices) with LUNOS-KNX-control



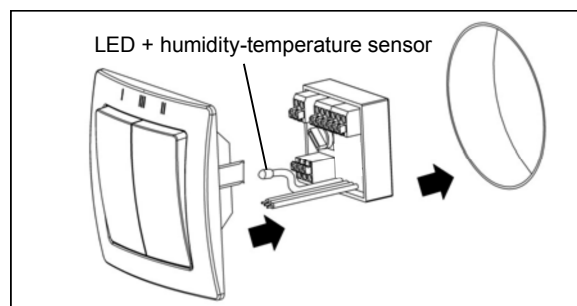
Coding switch settings - programs and airflow levels

Coding switch setting	Fan type	Functional description	Programs and airflow levels				Rockers W 2
			Rocker1 OFF	Rocker 1 ON	Rocker 1 OFF	Rocker 1 ON	
			Rocker 2 OFF	Rocker 2 OFF	Rocker 2 ON	Rocker 2 ON	
9	e ⁹⁰	OFF, three-step	OFF	5 m ³ /h	10 m ³ /h	20 m ³ /h	Summer ventilation
A	e ⁹⁰	Four-step	5 m ³ /h	10 m ³ /h	15 m ³ /h	20 m ³ /h	Summer ventilation
B	e ⁹⁰	Three-step and exhaust air	5 m ³ /h	10 m ³ /h	20 m ³ /h	45 m ³ /h (exh. air)	Summer ventilation
C	e ⁹⁰	OFF, two-step and exhaust air	OFF	5 m ³ /h	10 m ³ /h	45 m ³ /h (exh. air)	Summer ventilation
D	e ⁹⁰	Two-step and exhaust air	10 m ³ /h	20 m ³ /h	45 m ³ /h (exh. air)	45 m ³ /h (exh. air)	Summer ventilation

In all program options the filter change indicator is reset via actuating the rocker switch W1 once within 3 s.

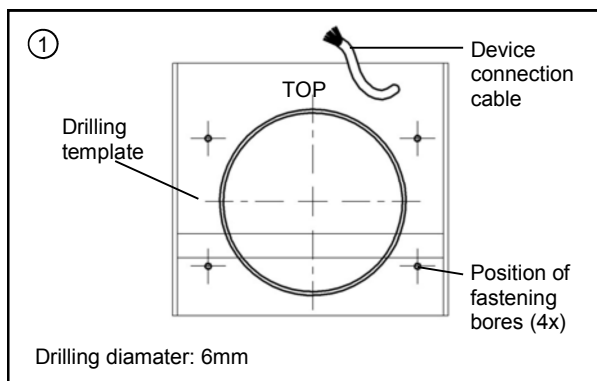
Assembly: Light-emitting diode of the control 5/UNI-FT in the switch

Attention! The light-emitting diode points upwards and is inserted into the circular opening on the underside of the switch provided by LUNOS! Please check whether there is an opening for the LED when using commercially available series switches!

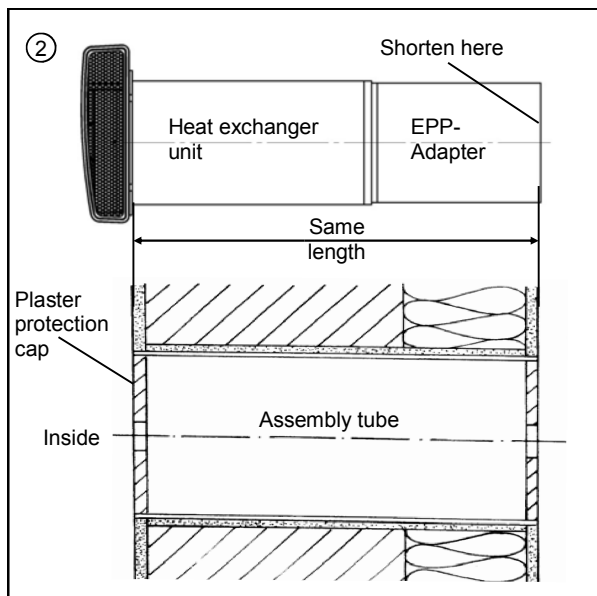


Drill the fastening bores for the inside room screen using the drilling template and insert the dowels enclosed.

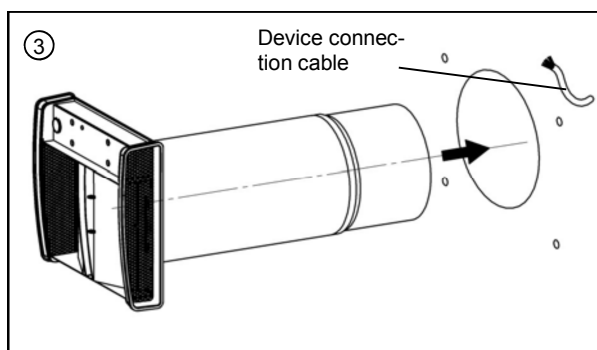
Note: Observe the label 'TOP', any deviating installation position is not admissible for flow-related reasons!

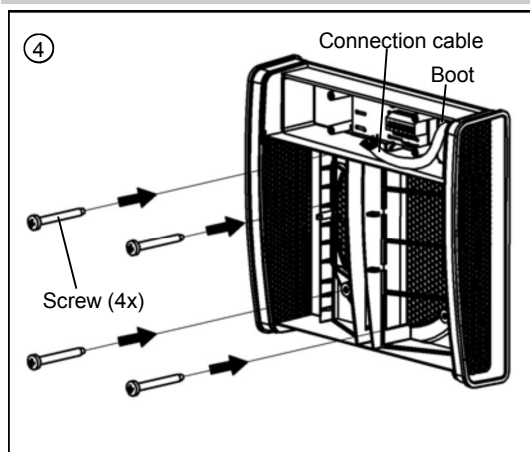


Remove the plaster protection cap. Shorten the EPP adapter to the length of the assembly tube. In the case of tube lengths above 500 mm, additional adapter pieces may be mounted!

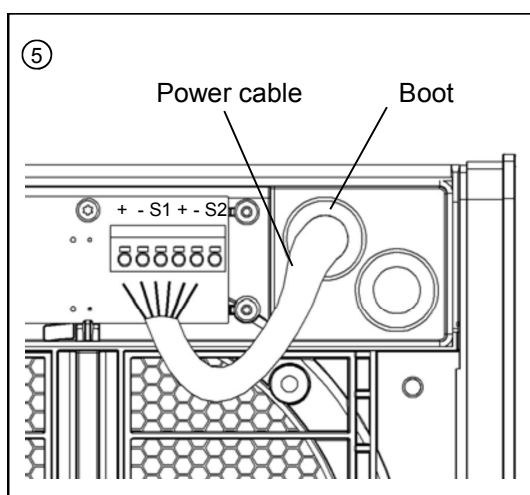


Insert the fan unit (inner housing sub-part, heat exchanger unit and EPP adapter) into the assembly tube!

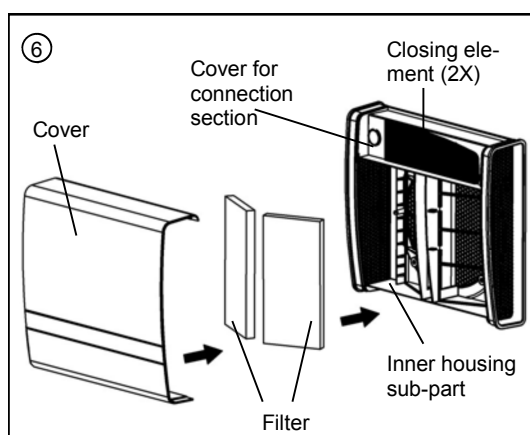




Insert the connection cable through one of the boots of the inner housing sub-part in the section of electrical connection! Fasten the inner housing sub-part to the wall using the screws enclosed!

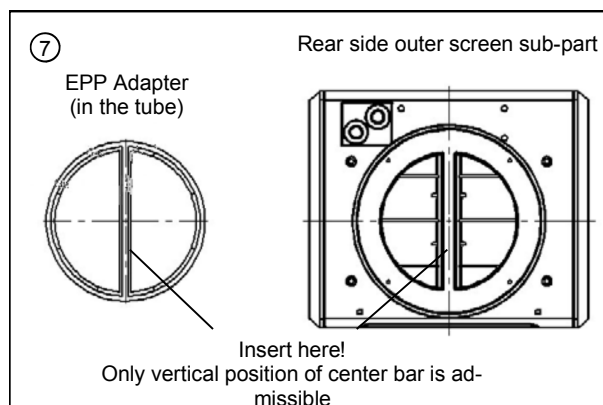


Connect the ventilation unit!
(Connection plan, refer to p 5)

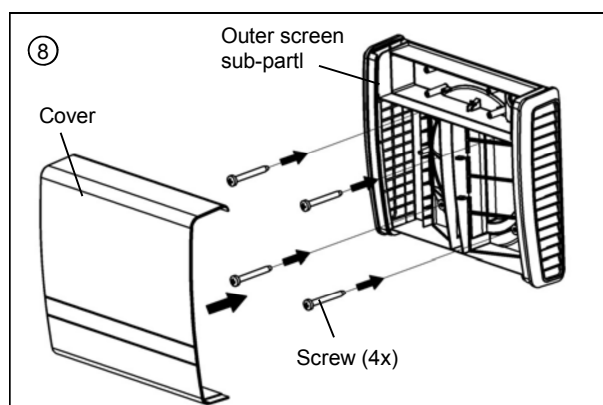


Mount the cover for the electrical connection section and insert the closing element on top!!
Insert the filter and snap the cover into place!

Using the drilling template, drill the fastening drill holes and insert dowels (in accordance with the surface) provided on-site (refer to "Assembly: Inside room screen", Image 1). Place the outer screen sub-part on the EPP adapter located in the tube!

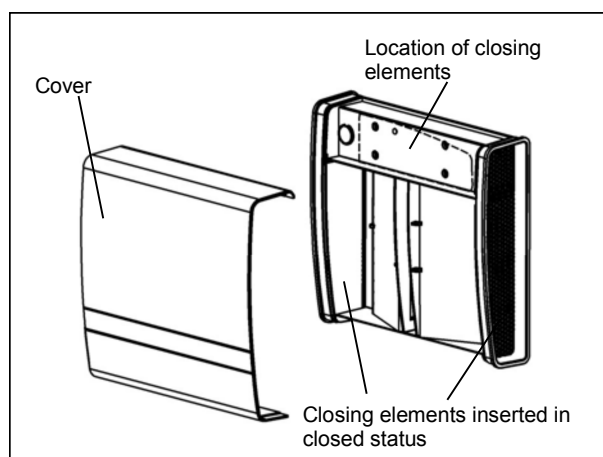


Fasten the outer screen sub-part using the screws enclosed! Place the cover on top!!



Closing the inner screen

The inner screen can be closed, if required, using the magnetic closing elements: Place the closing elements with the red side outwards from the inside in front of the fan grille! Apply the cover!



Filter replacement

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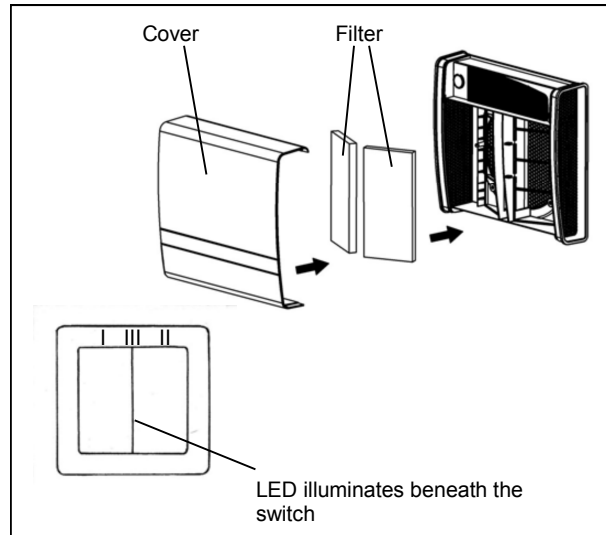
The filter replacement indicator signals that a filter is contaminated. In connection with the universal control a permanent red light of the LED illuminates beneath the switch.

Remove design screen, take filter out, insert new or cleaned filter (filters can be cleaned e.g. in a dishwasher), put design screen on.

The ventilation openings must not be blocked or covered.

Reset the filter change indicator by pressing the rocker switch W1 once. When using a push-button press the rocker switch W1 for 3 seconds.

For the functionality of the filter change indicator in connection with the TAC and the LUNOS-KNX Control please see the corresponding instructions.



Please enter the filter changes you have carried out:

Filter replacement date	Expected filter replacement	Type of filter used

Summer ventilation

EN

In this function the reversing time of the fan is increased to 1 hour, i.e. the fan runs in supply air mode for one hour, in the following hour in exhaust air mode etc..

Cleaning



If necessary wipe the indoor screen and covering frame with a dry soft cloth.

Filter replacement and cleaning must not be carried out by children or by persons who are not able to operate the device safely due to their physical, sensory or mental abilities or their inexperience or lack of knowledge.

Additional parts and replacement parts

Filter G3 Type 9/FEGO-3R, four-pack

Order No.: 039 998

Pollenfilter Type 9/FEGO-P, four-pack

Order No.: 039 982

EPP Adapter Type 2/AD 160

Order No.: 039 965



LUNOS Germany
LUNOS Lüftungstechnik GmbH
für Raumlufsysteme
Wilhelmstr. 31
13593 Berlin · Germany

Phone +49 30 362 001-0
Fax +49 30 362 001-89
info@lunos.de
www.lunos.de

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