



I DE **Einbauanleitung**
Dezentrales Lüftungssystem
mit Wärmerückgewinnung
Typen e², e²kurz und e²neo

- Bitte an den Nutzer weiterleiten -

II EN **Installation Manual**
Decentralised Ventilation System
with Heat Recovery
Type e², e²short and e²neo

- 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 specifications

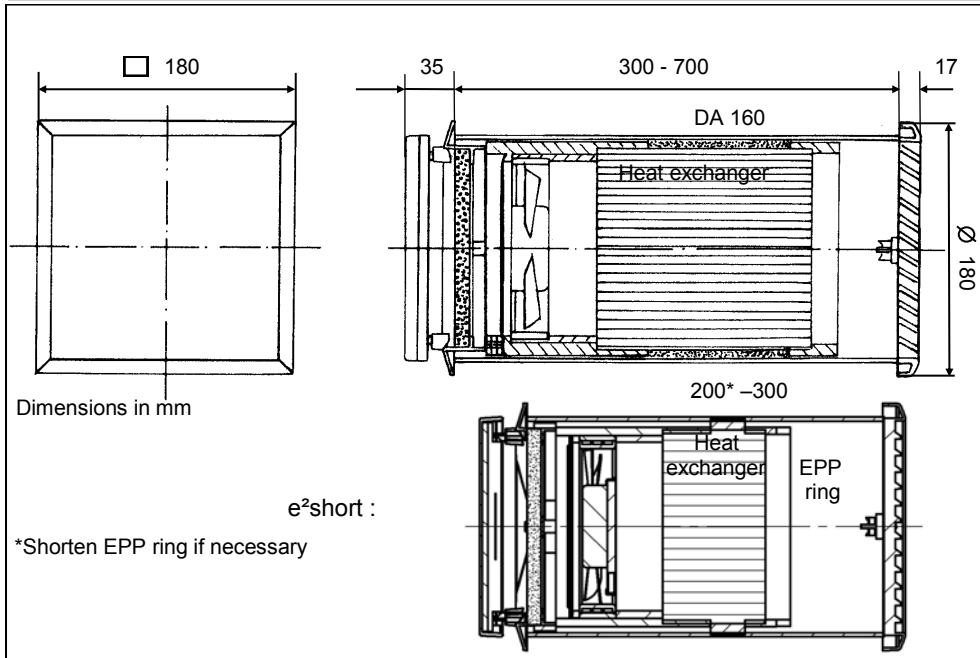
| | |
|---|--|
| Device voltage | 12 V DC SELV |
| Type of protection | IP 22 |
| Volume flow | 18 m ³ /h to 38 m ³ /h possible |
| Enveloping surface sound pressure level | 16.5 dB at 18 m ³ /h; 19.5 dB at 31 m ³ /h |

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 dimensions in mm)

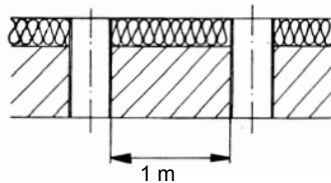
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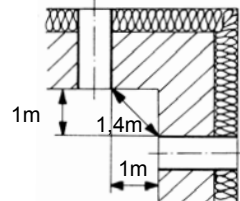
Installation position

Decentralised ventilation devices with heat recovery of the type e² only function in pairs in bidirectional operation. One device operates 70 s (50s for e² short) in supply air operation, the other 70 s (50 s for e²short) in exhaust air operation at the corresponding airflow level as set. Then the air direction is changed. It is thus ensured that the total of the airflow volume supplied is equal to the total exhaust airflow volume. If a device pair operating in push-pull operation is installed and operated in two different rooms of the flat, a sufficiently dimensioned interconnection between the air movement must be provided by excess flow air vents.

Recommended minimum spacing when installing a pair of devices in a wall:



Recommended minimum spacing when installing a pair of devices across a corner:



Do not place the devices above sensitive pieces of furniture, surfaces or pictures. The wall underneath the devices should be left "free".
Do not place the devices above or near room thermostats.

Operating range

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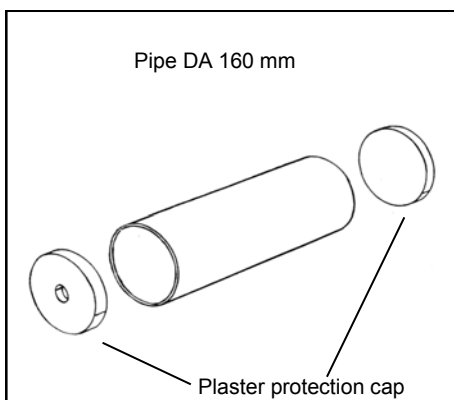
Temperature range: -15°C to +40°C

Usable with relative humidity levels of up to 65% in the interior area. During heating periods low levels of condensate formation may occur. When usage limits are exceeded, switch off the device and close the inner screen. Ensure fresh air supply by window ventilation.

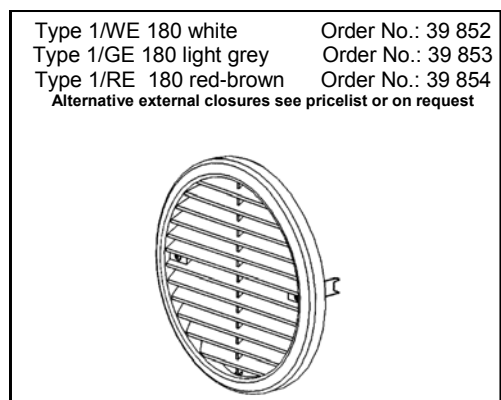
Shipping units

Check the supplies for completeness and mint condition!

Assembly pipe

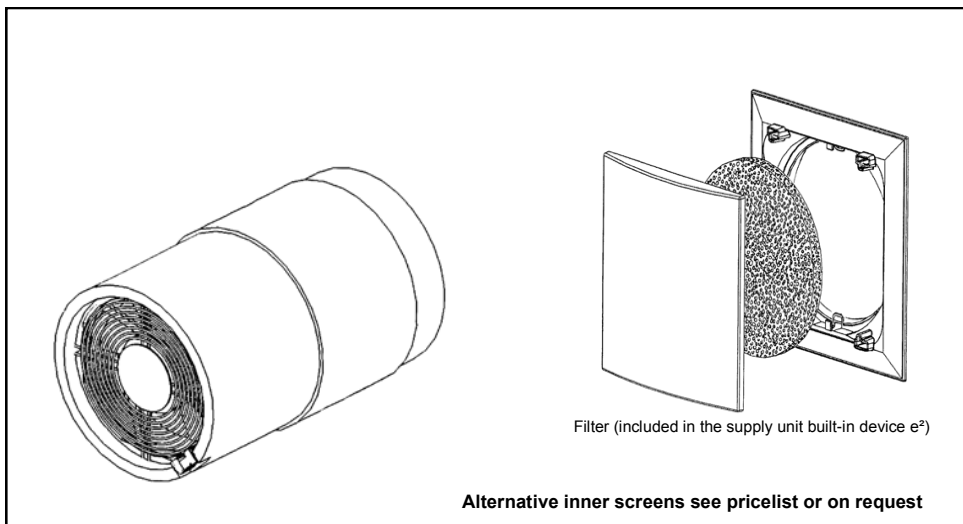


Outer grille



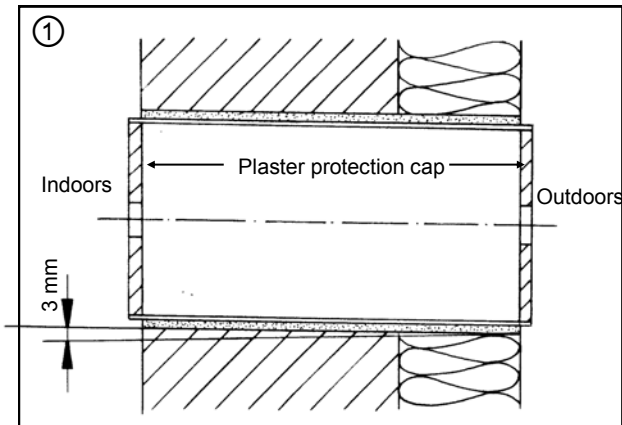
Insert e²

Inner screen

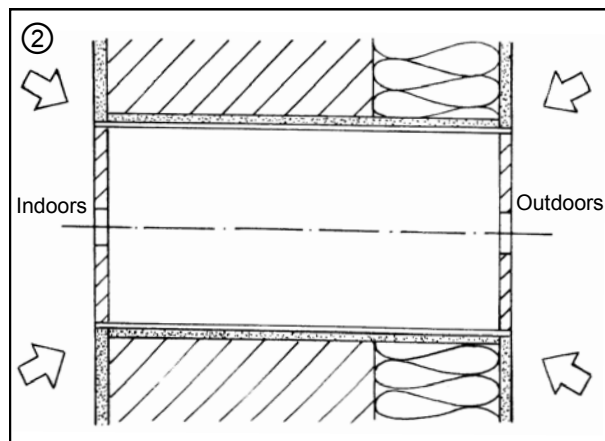


The outer grille 1/W 180 is supplied together with the facade protection ring 1/FSR 180. A corresponding installation manual is enclosed.

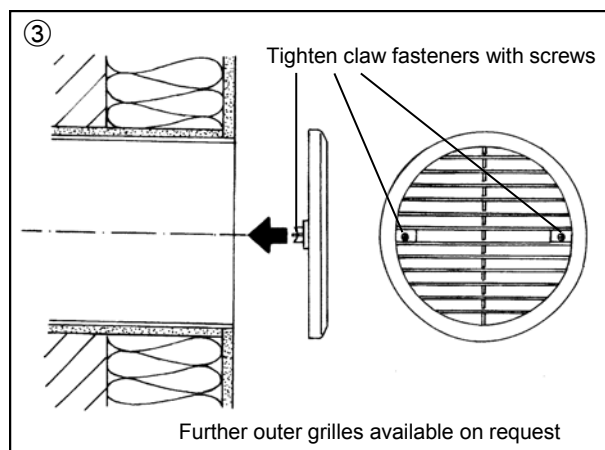
Make the wall openings for the assembly pipes (e.g. by coring, core bit \varnothing 162 mm).
 If necessary shorten the pipe to the required installation length (e²: min. 300 mm; e²short: min. 200 mm).
 Take care that the pipe overlaps on both sides to cope with the plaster thicknesses (after plastering the pipe must close flush with the plaster).
 Insert the pipe and seal it all around.
 (Assembly glue Order No. 038 733).







Apply plaster indoors and outdoors. If outer closure is plastered, first replace the plaster protection cap outdoors by an outdoor closure piece.



Remove the plaster protection cap outdoors. Assemble the outer grille using the integrated claw fasteners (tighten screws).



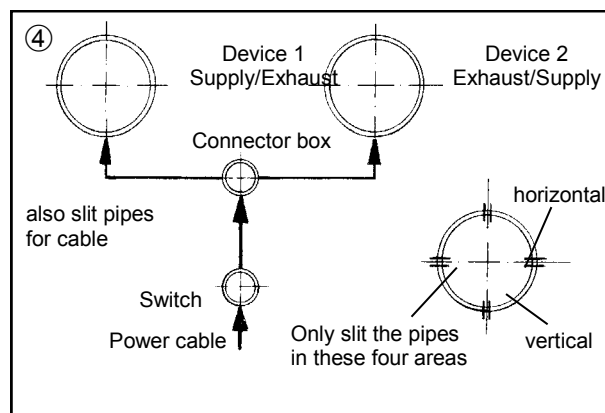
Safety instructions:

-  Caution! Any assembly work to the ventilation device may only be carried out when all poles of the supply voltage have been disconnected.
-  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 disconnecting 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 this ventilation system are not allowed.

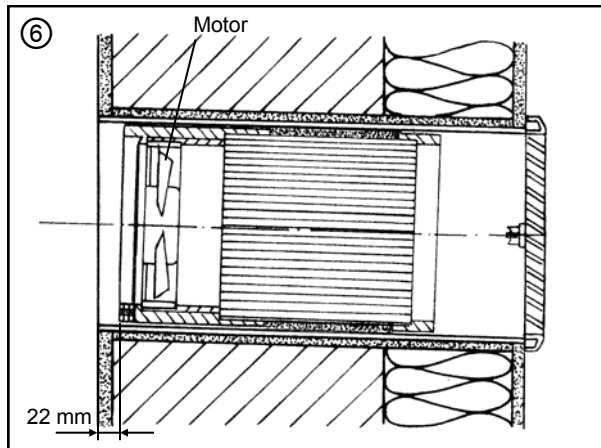
The system can be controlled via several controls of LUNOS.

Follow the relevant installation instructions.

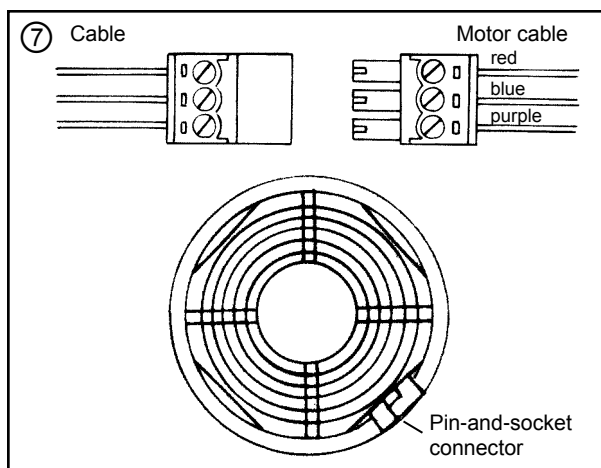
Select the position of the switch. Slit the cable ducts (power cable + cable to the device pairs) and the pipes (2 cm deep). Lay the power cable (e.g. 3 x 1.5 mm²) and the cables to the pairs of devices (e.g. 3 x 0.75 mm²). Place the cables to the device pairs ready in the pipes. Circuit and switch are connected as shown in the diagram below.



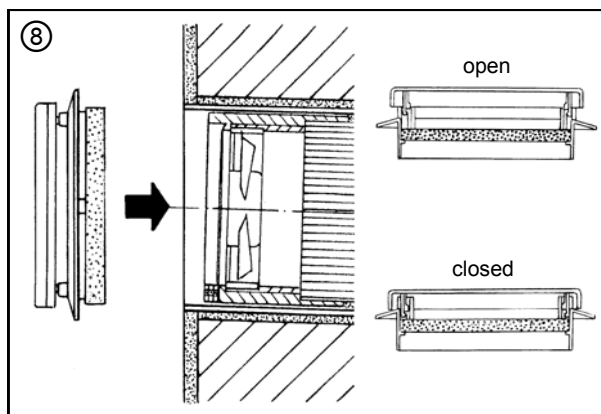
Remove plaster protection cap inside, insert heat exchanger unit into the assembly pipe, ensure there is a 22 mm spacing. Motor is on the inside. Using the loop on the inside of the heat exchanger unit the said unit may be pulled out for correction purposes.



Connect cables to plugs, insert pin and socket connectors into the recess of the heat exchanger casing.



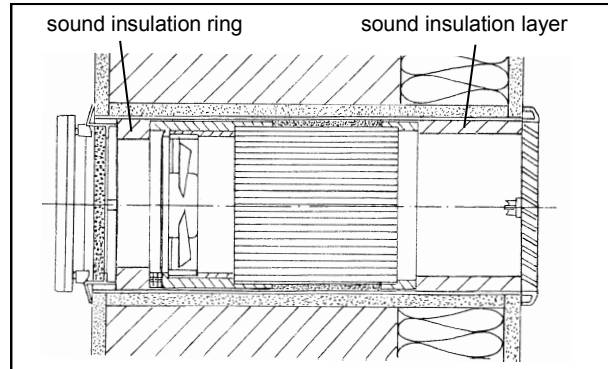
Insert inner closure with filter casing, snap the indoor screen into place in open position. Ready.



Assembly: Sound insulation set

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Can be used as from a pipe length of 300 mm for e^2 . Position sound insulation ring and sound insulation layer as depicted. The sound insulation layer can be shortened if necessary.



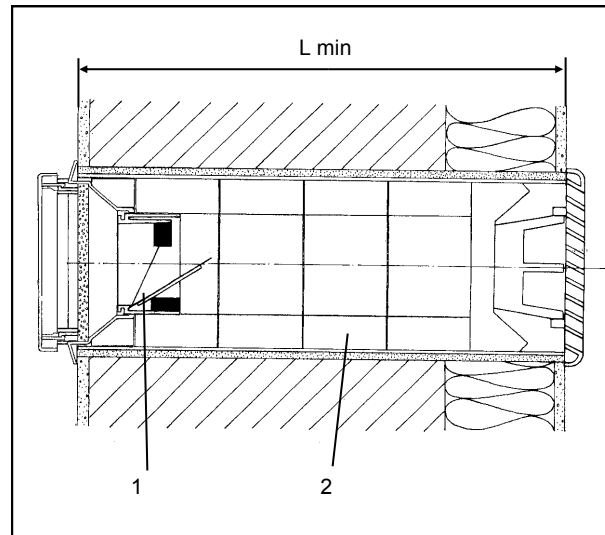
Replacement of ALD-R 160 by e^2

When carrying out a replacement the following parts of ALD-R 160 are not required any more:

1. wind pressure relief
2. noise absorber elements + noise absorber end fitting

The minimum length L_{min} of the assembly pipe should be 300 mm. When keeping the outer closure with clamp spring (types 1/R... 180) L_{min} is 320 mm.

The assembly of the e^2 is then carried out as described in this manual from page 5 onward.



Note on LUNOS outer covers

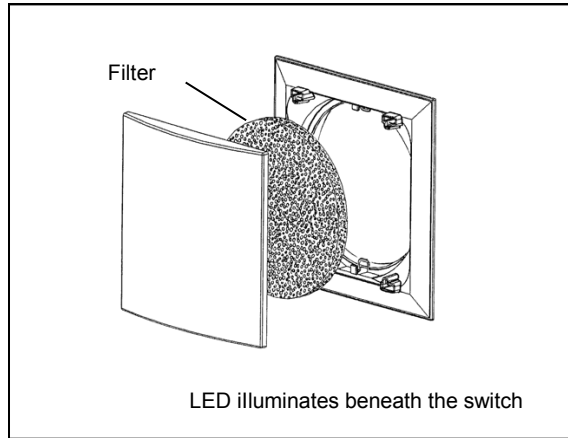
The full-plastic outer covers supplied by LUNOS provide high resistance to driving rain and meet the requirements of Stress Group III according to DIN 4108-3 (2014-11). Metallic or metal-coated covers can be used in Stress Group I in accordance with DIN 4108-3 (2014-11).

For buildings in wind-exposed locations or if there is a risk of strong winds and rain on the outer covers, additional weather protection measures must be taken, if necessary.

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 front cover, take filter out, insert new or cleaned filter (filters can be cleaned e.g. in a dishwasher), put front cover 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 or the LUNOS-KNX Control please see the corresponding instructions.



Please note below information on the filter changes you have carried out:

| Filter replacement date | Expected filter replacement | Type of filter used |
|-------------------------|-----------------------------|---------------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

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


| | |
|---|-------------------|
| Indoor screen compl. 9/IBE | Order No.: 39 851 |
| Replacement filter G3, 9/FIB3R, three-pack | Order No.: 37 214 |
| Sound insulation set 9/SW | Order No.: 39 850 |
| Wind pressure relief 9/WDSE (for assembly pipes from 370 mm length) | Order No.: 39 860 |
| Sound protection screen 9/IBS | Order No.: 39 947 |

Safety instructions:

-  Beware! Any assembly work to the ventilation device may only be carried out when all phases of supply voltage have been disconnected!
-  Make sure that the supply voltage of all connection lines is dead! (separation from the power supply with a free space between contacts of at least 3 mm, e.g. all-phase disconnecting electr. protection).
-  Each electric circuit of this ventilation system must be fitted with a residual current protection (e.g. RCD)!

 **WARNING – TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, OBSERVE THE FOLLOWING:**

- a.) Installation work and electrical wiring must be done by qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
- b.) Sufficient air is needed for proper combustion and exhausting of gases through the flue (chimney) of fuel burning equipment to prevent back drafting. Follow the heating equipment manufacturer's guideline and safety standards such as those published by the National Fire Protection Association (NFPA), and the American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), and the local code authorities.
- c.) When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.
- d.) Ducted fans must always be vented to the outdoors.
- e.) If this unit is to be installed over a tub or shower, it must be marked as appropriate for the application and be connected to a GFCI (Ground Fault Circuit Interrupter) – protected branch circuit.

-  The product's installation shall not conflict with any requirement in the National Electrical Code, ANSI/NFPA 70-1999.

Additional installations and electrical components in this ventilation system are prohibited!



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