Installation Manual

Decentralised Ventilation System with Heat Recovery

Type Ne\textsuperscript{xx}t
# Installation Manual

## Reference these directions, safety instruction, waste disposal
- These directions describe the surface mounting and concealed installation of the decentralized ventilation devices with heat recovery Type Ne**t**
- Before the installation, read these directions through carefully and completely! It is absolutely necessary to consider the general notes on safety and the safety symbols with notes in the text.
- These directions are to be handed over to the user on completion of the installation (tenant, owner, building administration etc.).

⚠️ This symbol warns you of the danger of injury.
⚠️ This symbol warns you of the danger of injury through electric current.

## Notes on safety

**Caution!** All assembly work on the ventilation device may be implemented only with all-pole disconnected mains voltage! The ventilation device is double-insulated according to Protection Class II and the protective ground terminal is dispensed with!

**Attention!** The electrical connection may be carried out by authorized skilled personnel only and according to valid VDE 0100!

**Attention!** This device (filter change/cleaning) may not be operated by children and persons who are not capable of safely operating it due to their physical, sensory or intellectual capabilities or their inexperience or lack of knowledge. Children should be supervised in order to ensure that they do not play with the device.

## Waste disposal
- Dispose of the packaging sorted according to material. If you wish to detach anything from the device, dispose of it according to current stipulations. The communal agency can provide information.

## Content

<table>
<thead>
<tr>
<th>Reference these directions, safety instruction, waste disposal</th>
<th>Page:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference these directions, safety instruction, waste disposal</td>
<td>28</td>
</tr>
<tr>
<td>Dimension drawings</td>
<td>29</td>
</tr>
<tr>
<td>Wall housing</td>
<td>30</td>
</tr>
<tr>
<td>Technical data, mounting position, assembly features, area of application</td>
<td>31</td>
</tr>
<tr>
<td>Installation examples</td>
<td>32</td>
</tr>
<tr>
<td>Dispatch units</td>
<td>33</td>
</tr>
<tr>
<td>Inside screen</td>
<td>34</td>
</tr>
<tr>
<td>Installation - Surface mounting</td>
<td>36</td>
</tr>
<tr>
<td>Installation - Flush and concealed installation</td>
<td>39</td>
</tr>
<tr>
<td>Installation - Installation of EPP adapters and exterior panels</td>
<td>41</td>
</tr>
<tr>
<td>Installation - Finished installation</td>
<td>42</td>
</tr>
<tr>
<td>Electrical connection - wiring diagrams</td>
<td>44</td>
</tr>
<tr>
<td>Operating element</td>
<td>46</td>
</tr>
<tr>
<td>Affixing of modules on the control</td>
<td>47</td>
</tr>
<tr>
<td>Filter replacement</td>
<td>48</td>
</tr>
<tr>
<td>Close-off of the inside screen, USB connection</td>
<td>49</td>
</tr>
<tr>
<td>Fault signals - Fault remediying</td>
<td>50</td>
</tr>
<tr>
<td>Note on LUNOS exterior coverings, cleaning, addition / replacement parts</td>
<td>51</td>
</tr>
</tbody>
</table>

## Reference these directions

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## Waste disposal
- Dispose of the packaging sorted according to material. If you wish to detach anything from the device, dispose of it according to current stipulations. The communal agency can provide information.
NeXT—surface mounted

167 (with reference to face)

NeXT—concealed mounted

167 (with reference to face)
Caution! The surrounding claws must be with its upper edge plaster-flush in the finished plaster below! This is of decisive importance for the correct function of the device.

Wall housing Ne**t

Mains connection / Adapter
Installation position

Installation of the ventilation system shall allow for a minimum lateral distance to walls, cupboards and/or windows of 30 cm and a minimum vertical distance of 15 cm to floors, ceilings, bulk heads or similar.

The lateral distance ensures optimal airflow, the vertical distance ease of installation.

The ventilation system is most user-friendly if installed about 1.5 meters above finished floor level.

Installation features

- The ventilation device must be installed indoors vertically on an external wall.
- Only one installation position is possible and this should indicate air ports to the right and left above.
- The ventilation device must always be freely accessible for operation and maintenance, the air ports may not be built over, adjusted or covered
- In case of retrofit installation, make sure that there are no supply lines lie (e.g. gas, water, current) in the area of the wall break-through
- Make sure that the wall break-through corresponds to the local requirements, as appropriate pull in a little

Area of application

Temperature application range: -15°C to 40°C +
Can be used with a relative air humidity level up to 65% in the indoor area. Small build-ups of condensation during the heating season can be possible. In case of exceeding the employment limits, switch off the device and close off inside screen. Ensure a fresh air supply through window ventilation.
Condensate could occur, can drain and does not remain in the unit. In the wintertime please ensure that there is no ice on the footpath under the outer hood and forming icicles will be be removed or be assured that no one will be injured by falling objects.

<table>
<thead>
<tr>
<th>Technical data</th>
<th>EN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device voltage:</td>
<td>230 V AC 50 Hz</td>
</tr>
<tr>
<td>Control voltage:</td>
<td>1 - 10 V DC SELV</td>
</tr>
<tr>
<td>Electrical power consumption:</td>
<td>5.7 - 40/46.5 W</td>
</tr>
<tr>
<td>Protection type:</td>
<td>IP 22</td>
</tr>
<tr>
<td>Volume flow:</td>
<td>15 - 90/115 m³/h</td>
</tr>
</tbody>
</table>
Installation examples

Surface installation

Concealed installation

External panel 1/EGA

External panel 1/HWE-2 oder 1/HAZ-2
Dispatch units

Check the delivery for completeness and trouble-free status!

**Slide-in units**

- **Either**
  - Slide-in unit with cross counter-flow heat exchanger
  - Type NXT-G
  - Cover with view frame
  - + Filter, magnetic close-off and bolt accessory

- **Or**
  - Slide-in unit with cross counter-flow heat exchanger
  - Type NXT-G
  - Cover with view frame
  - + Filter, magnetic close-off and bolt accessory

**Wall installation housing**

- **Type 3/NXT**
  - + Plaster protective cover (= drill template), passive transition piece, EPP adapter and bolt accessory

**Surface-mounting set**

- **3/NXT-AP**
Type NXT-IBF

Electrical flap close-off
Type 9/KVEN-2 Order No.: 040 095
+ Bolt accessory

Adapter (passive transition piece)
Always enclosed with the delivery unit "Wall installation housing"!
Pipe DA 160 mm

Plaster protective cover

External close-offs
Either
Or

External panel Type 1/
EGA

Cover
Lower part

+ Bolt accessory

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

Frame
Cover
Connecting screws

+ Bolt accessory

Type 2/AD 160 Order No.: 039 965
Stipulate the positions of the dowel fixing of the wall installation housing and the position of the core bore of the wall break-through pipe with the aid of the drill template (= plaster protective cover).

Manufacture the core bore for the wall break-through pipe.

Drill the holes for the wall fastening dowels.

Make available the mains cable (and as appropriate, the control lines).

Cable exit from the wall only in the area marked on the drill template.

Mount the wall break-through pipe internally and externally with slight protrusion for the bridging of the plaster thickness! Keep to the slope indicated in the illustration.

Clean the pipe externally.
Insert the electrical flap close-off and the passive transition piece into the wall installation housing from internally, and fix it with the enclosed bolts.

Strip the insulation from the cable to the electrical flap close-off 5-7mm und connect the electrical flap close-off.

A separate assembly instruction is enclosed with the electrical flap close-off.

Between the circumferential ribs of the electrical flap close-off respectively the passive transition piece a adhesive and filling sealing must be applied circumferentially (e.g. assembly adhesive 038733)

To prevent the connection of ingressing condensate it must be performed waterproof.

Compose the surface-mounting set from its four wall parts by simple interconnecting. Insert the wall installation housing into the surface-mounting set.
Guide the mains cable (and the control line) into the wall installation housing through the rear-side cable-support sleeve. For this purpose, take the mains connection circuit board from the wall installation housing and return it after completed mains connection. Fix the wall installation housing together on the wall with the attached surface-mounting set! Ensure in this case that the electrical flap close-off is fitted exactly into the wall installation pipe! Connect the mains cable (and the control line). For electrical connection, see chapter "Electrical connection - wiring diagrams".

Caution! All assembly work on the ventilation device may be implemented only with all-pole disconnected mains voltage!
Installation - Concealed installation

1. Manufacture the wall cut-out for the wall installation housing.

2. Stipulate the position of the core bore for the wall break-through pipe with the aid of the wall installation housing. Manufacture the core bore for the wall break-through pipe.

3. Mount the internal wall break-through pipe flush with the wall opening, externally with slight protrusion for the bridging of the external plaster thickness. Keep to the slope indicated in the illustration. Clean the pipe externally.

---

Core bore Ø: 162 mm
Insert the electrical flap close-off or the passive transition piece into the wall installation housing from internally and fix it with the enclosed bolts.

Strip the insulation from the cable to the electrical flap close-off 5-7mm and connect the electrical flap close-off.

**A separate assembly instruction is enclosed with the electrical flap close-off.**

Between the circumferential ribs of the electrical flap close-off respectively the passive transition piece a adhesive and filling sealing must be applied circumferentially (e.g. assembly adhesive 038733)

To prevent the connection of ingressing condensate it must be performed waterproof.

Insert the wall installation housing into the wall section. Ensure the electrical flap close-off is fitted exactly into the wall breakthrough pipe. Align the surrounding collar of the wall installation housing plaster-flush as represented. Fix the wall installation housing in the wall section (e.g. with construction foam).
Slit the cable conduit for the mains cable (and as appropriate, the control lines).

Guide the mains cable (and the control line) into the wall installation housing through the side cable support sleeve and connect these.

For this purpose, take the mains connection circuit board from the wall installation housing and return it after completed mains connection.

For electrical connection see chapter "Electrical connection - wiring diagrams".

Caution! All assembly work on the ventilation device may be implemented only with all-pole disconnected mains voltage!

Minimum of the cable length: 20 cm.

Installation - Installation of EPP adapter and external panels

Installation of the EPP adapters:
Insert the EPP adapter into the wall break-through pipe from externally.

Note here that you insert EPP adapters with vertical cross-piece and matching the flap close-off.

As appropriate, shorten the EPP adapters pipe-flush.

In order to guarantee air sealing and condensate drainage, the EPP adapters must sit closely pressed together in the wall installation pipe.

The installation of the external panels 1/EGA and the weather-protection bonnets 1/HWE-2 and 1/HAZ-2 is implemented in accordance with the assembly instructions enclosed with these parts.
Insert the slide-in unit into the wall installation housing! Note: The slide-in unit must joint exactly into the electrical flap close-off and on the mains connection circuit board! With the insertion the electrical connection of the slide-in unit is realized!

Place the housing lid onto the wall installation housing with the slide-in unit contained in it! Screw the housing lid onto the wall installation housing with the enclosed bolts!

Insert the filters! Note the correct flow-streaming direction of the filters, where this is marked with an arrow!
Connect the operating element of the inside screen to the control unit of the slide-in unit!

Place on the inside screen; it is held by magnets contained in the four fastening points!
Finished!
Electrical connection - Wiring diagrams

Notes on safety

⚠️ Caution! All assembly work on the ventilation device may be implemented only with all-pole disconnected mains voltage!
Set all connecting lines voltage-free before connection of the ventilation device to the mains voltage!
(Disconnection from the mains with at least 3 mm contact gap, e.g. all-pole disconnection elec. protection).
Every electric circuit associated with this ventilation system must be equipped with a leakage current protection (e.g. residual-current-operated circuit breaker).
Electrical connection by a specialist only!

Use maximum NYM - J 5 x 1.5 mm² as a mains cable. The connection of the PE conductor is absolutely necessary!
For the connection of the TAC and/or the gesture control, use cables of the type J-Y(Si)Y (2x2x0.8), max. 1.5 mm²! The pigtail connections for the electrical flap close-off are enclosed ex-works!
Mains connection circuit board and mains power connection terminals for the support are labeled!
Do not loosen one of the cables already connected by the manufacturer to the mains connection circuit board under any circumstance!

Wiring diagrams

Operation over the operating element on the device and representation of the connections of the electrical flap close-off, the gesture control and the TAC

Mains connection circuit board (view from below)

For the electrical flap close-off 9/KVEN-2 (optional)
For the gesture control 5/GS (optional)
For TAC (optional)
Netzanschluss

18
Manual switching of the volume flow stages over an external two-pole button:
L1 = Volume flow stage more; L2 = Volume flow stage less
Note: DIP switch 2 must be in position OFF for that.

Manual switching of the volume flow stages over an external single-pole button on L1 and simultaneous operation of one or more air-extraction fans over coupling on L2 for the compensation of the additional vacuum pressure arising from the exhaust-air ventilators.
L1: 1x key: Volume flow stage more; 2x key: Volume flow stage less
Note: DIP switch 2 must be in position ON for that.
### Operating element

<table>
<thead>
<tr>
<th>No.</th>
<th>Function</th>
<th>Control Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ON/OFF</td>
<td>Key and indication</td>
</tr>
<tr>
<td>2</td>
<td>Volume flow less</td>
<td>Key</td>
</tr>
<tr>
<td>3</td>
<td>Volume flow stage</td>
<td>Indication</td>
</tr>
<tr>
<td>4</td>
<td>Volume flow more</td>
<td>Key</td>
</tr>
<tr>
<td>5</td>
<td>Possibility of the disconnection of the key back-lighting</td>
<td>Key and indication</td>
</tr>
<tr>
<td>6</td>
<td>Summer circuit</td>
<td>Key and indication</td>
</tr>
<tr>
<td>7</td>
<td>Automatic operation</td>
<td>Key and indication</td>
</tr>
<tr>
<td>8</td>
<td>WLAN</td>
<td>Key and indication</td>
</tr>
<tr>
<td>9</td>
<td>Antifreeze operation warning display</td>
<td>Indication</td>
</tr>
<tr>
<td>10</td>
<td>Filter change indication</td>
<td>Indication</td>
</tr>
<tr>
<td>11</td>
<td>Error indication</td>
<td>Indication</td>
</tr>
</tbody>
</table>

### Ex-works setting:

- **White DIP switch**
  - 1 2 3 4
  - 1 2 3 4

- **NeXT NXT-G**
  - Standard key function according to wiring diagram 2

- **NeXT NXT-K**
  - Special function according to wiring diagram 3

**Attention! Do not change the adjustment of the DIP switch 1!**
Affixing of modules on the control

Caution! All assembly work on the ventilation device may be implemented only with all-pole disconnected mains voltage! Set all connecting lines voltage-free before connection of the ventilation device to the mains voltage! (Disconnection from the mains with at least 3 mm contact gap, e.g. all-pole disconnection elec. protection).

The control of the NeXT can be extended by pinning of modules. For the radio module, the larger bag is planned to the right. Remove the inside screen and loosen the plug connection to the operating element. Plug the module into the bag provided for that as represented. Ensure that the module is placed on correctly and completely! Pin the operating element again and place on the inside screen again.
A soiled filter is signaled through the filter change indication.
Remove the inside screen for the filter change and loosen the plug connection to the operating element.
Withdraw the two filters from their receptacles. Insert two new filters.
Pay attention in this case to the direction of flow marked on the filters.
Reset the filter change indication over the corresponding key - the lamp of the LED below the key goes out.
Place the operating element on again and place on the inside screen again.

Please note here the filter changes implemented by yourself:

<table>
<thead>
<tr>
<th>Filter change date</th>
<th>Probable filter change</th>
<th>Inserted filter type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

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Set all connecting lines voltage-free before connection of the ventilation device to the mains voltage!
(Disconnection from the mains with at least 3 mm contact gap, e.g. all-pole disconnection elec. protection).
Locking of the inside screen

In case of electrical flap close-off not being present, the inside screen can be closed off with the magnetic fasteners if necessary:
Switch off ventilation device and, with the red side facing out, place fasteners from externally in front of the ventilation grating.

USB connection

The USB connection can be used for communication with a PC and the possibility of program updates exists for your Ne-t.
Connect Ne-t and PC with a USB cable. For updating the firmware, download the update file (www.lunos.de). The directions for the implementation of the update are enclosed with every update file.
### Note on LUNOS external coverings

The external coverings of fully-synthetic material offered by LUNOS provide for a high resistance to driving rain and can be employed in Stress Group III in accordance with DIN 4108-3 (2014-11). Metallic or metallically-coated external grids in Stress Group I in accordance with DIN 4108-3 (2014-11) can be employed. In the case of buildings in locations exposed to wind or the hazard of strong winds and rain on the external coverings, further weather-protection measures are to be taken as appropriate.

### Cleaning

⚠️ If required, wipe inner facade and housing parts with a dry soft cloth. Filter change and cleaning may not be implemented by children and persons who are not capable of safely to implement these actions due to their physical, sensory or intellectual capabilities or their inexperience or lack of knowledge.

### Additional / Replacement parts

<table>
<thead>
<tr>
<th>Component</th>
<th>Order Code</th>
<th>Order No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filter M5 (2 Items)</td>
<td>9/FNXT-5</td>
<td>040 109</td>
</tr>
<tr>
<td>Filter F7 (2 Items)</td>
<td>9/FNXT-7</td>
<td>040 110</td>
</tr>
<tr>
<td>Filter F9 (2 Items)</td>
<td>9/FNXT-9</td>
<td>040 111</td>
</tr>
<tr>
<td>Radio module</td>
<td>5/FM</td>
<td>040 083</td>
</tr>
</tbody>
</table>