

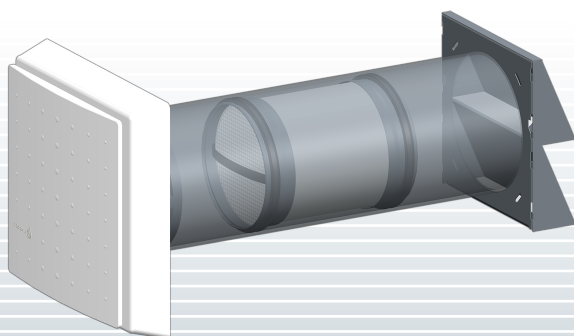


*Fresh air
inspires.*



AirOdor

*Decentralised ventilation
for a healthy living
environment*



LIMODOR
INNOVATION ON AIR

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Errors and technical modifications subject to change.

Why?

Controlled ventilation of the living environment with heat recovery

Fully sealed construction and sound proofing

Controlled housing ventilation systems in residential housing means, controlled supply and extraction of air in quantity and placement or in other words, discharged. This is necessary because on the one hand, modern building designs are becoming ever more airtight which in turn causes a hindrance to the natural ventilation of living areas. On the other hand, traffic is increasing in cities causing increases in noise pollution. In exposed locations it is therefore no longer possible at any time of the day or night to open windows and allow fresh air into the rooms.

Allergies reduce the quality of life

Millions of people suffer from allergies and respiratory diseases and throughout the day (even at night) are mostly exposed and unprotected against pollen flight. To protect from these pollen flights many people close their windows and live, as a result, in poorly ventilated rooms or apartments.

AirOdor the little fine one

By installing one or more decentralised AirOdor single-room ventilation units for the controlled ventilation and heat recovery of your home, you ensure a pleasant feel-good climate within your own four walls.



AirOdor - Soundproof cover

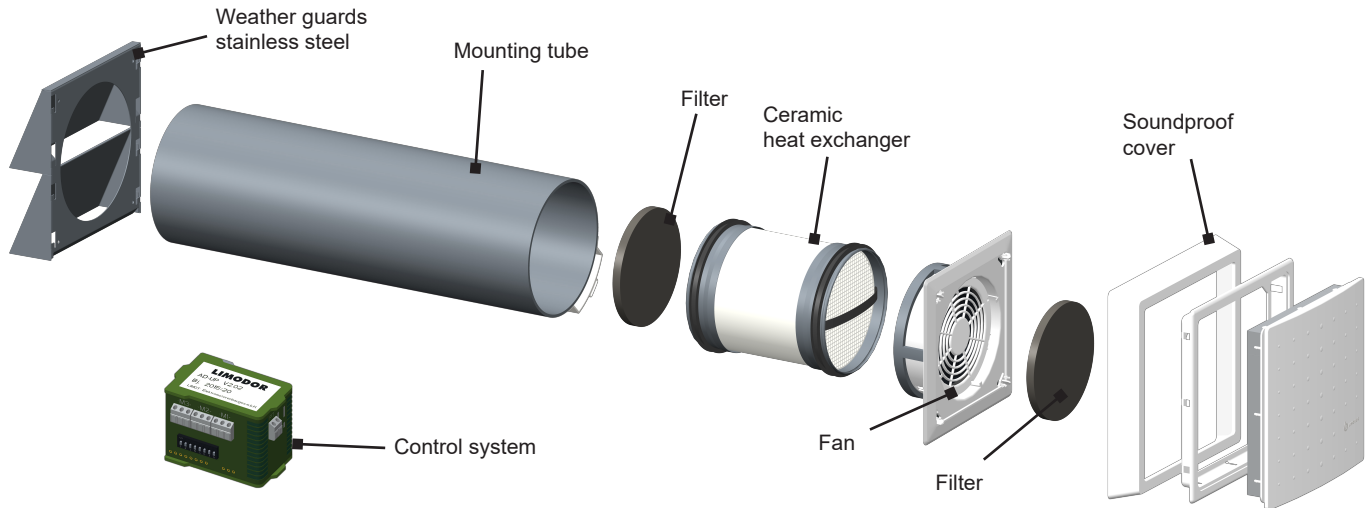
What are the advantages of AirOdor:

- Pure, fresh air through double filtering
- Savings in heating costs through the winter months by effective heat recovery of up to 82%
- Condensate is discharged through the exterior wall
- Fresh air supply with closed windows and sound insulation achieved through sound insulation built into the unit
- Low energy consumption $< 0.17 \text{ W m}^3/\text{h}$
- simple installation during renovations and subsequent exterior wall installations
- Low space requirement in the living area
- Combination with standard extraction units is not a problem
- Low maintenance costs
- 3 levels of air volume control



AirOdor - Soundproof cover

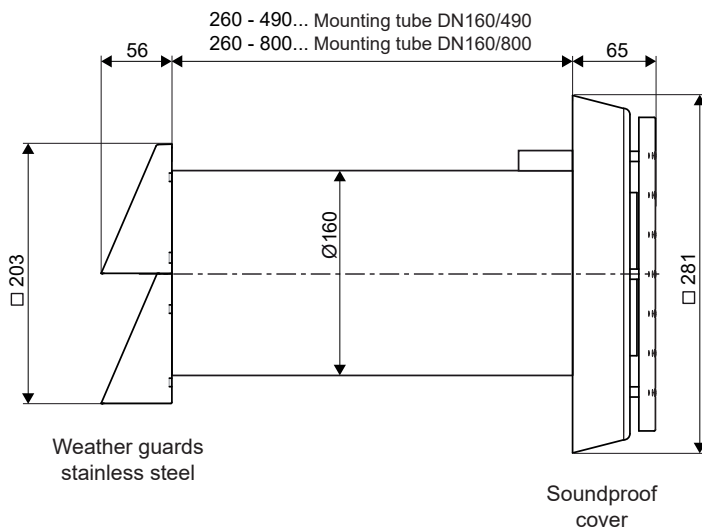
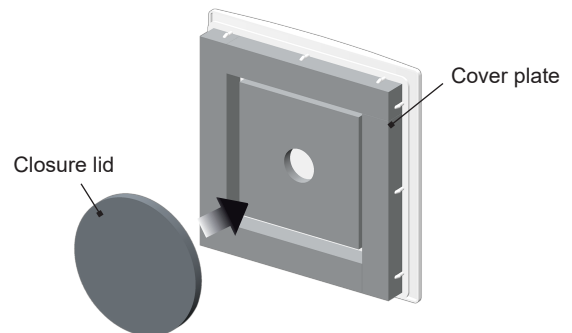
AirOdor - single-room ventilation unit with heat recovery



The LIMODOR AirOdor single-room ventilation unit consists of various components. The systems cover is a light grey plastic tube with an outer diameter of 160 mm which is available in two different lengths. The highly-efficient ceramic heat exchanger (incl. filter) and the fan unit are inserted into the mounting tube. The fan unit includes a soundproof fan component which is equipped with an energy-saving motor, an extraction filter and a white cover plate (normal or a Soundproof cover).

For the outside facade you can choose between a weather guards made of plastic (white - similar to RAL 9016) or stainless steel with soundproofing.

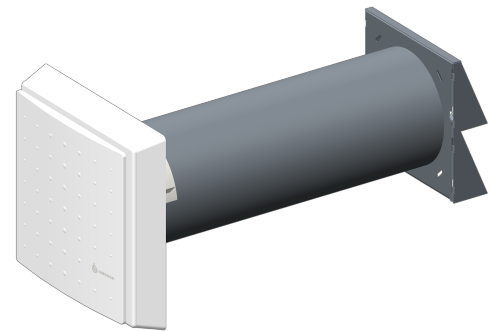
When the device is switched off, the unit has a closed lid at the ventilation intake and exhaust opening. This is especially necessary when no air exchange with the outside air is desired. When the closure lid is not in use, it acts as the cover plate and also serves as insulation.



Air volume can be set between 15 and 28 m³/h via the room switch. Furthermore, a permanent base load of 12 m³/h is configurable via the control unit. Each of the air volume levels can be additionally adjusted by +/- 10% via a potentiometer on the control unit.

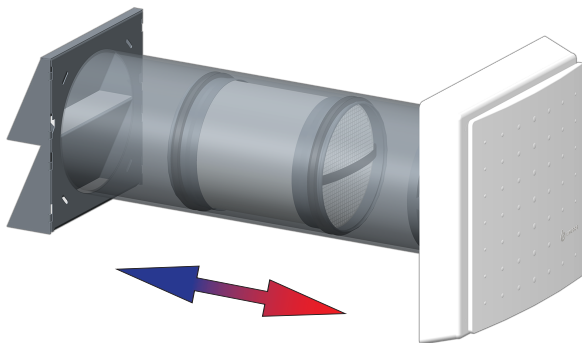
Technical data:

Voltage:	12 VDC
Control type:	PWM (pulse width modulation)
Energy efficiency class, max ¹⁾ :	A
Air output ¹⁾ :	12 / 15 / 28 m ³ /h
Power consumption ¹⁾ :	2,3 / 3,0 / 5,6 Watt
Power consumption ¹⁾ :	0,34 A
Sound insulation ²⁾ :	up to 22 dB (Testing institute - Fraunhofer)
Sound power level ²⁾ :	up to 35 dB(A) (Self-measurement - Limot)
Heat recovery range:	up to 82% (Testing institute - DIBt)
Filter type:	Filter foam
Filter class air supply / exhaust:	G3
Place of installation:	External wall
Type of installation:	Flush
Wall thickness:	260 - 490 (800) mm
Operating temperatures:	+60°C bis -15°C
Weight:	3,5 kg
Housing colour:	White (similar to RAL 9016)



- 1) Reference equipment: 2 AirOdor with a control system AD-UP or AD-UV (reference DIN EN 13141-8)
- 2) Inherent noise depending on the device structure

Functional principle:

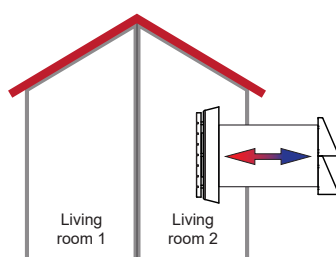


“Polluted air“ is filtered and extracted to the outside via the ceramic heat exchanger. As a result, the heat exchanger warms up.

After the set clocking time of 45 or 60 seconds (set at the control unit) the axial fan changes the direction of rotation and proceeds to draw „fresh air“ from outside, filter the air and deliver through the earlier heated ceramic heat exchanger and finally, into the room.

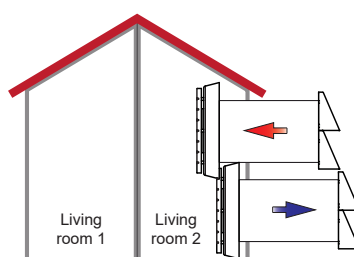
Single operation in the living area

By means of the main control, the AirOdor is controlled in alternate airflow directions (supply or extraction). A slight under/overpressure is created in the living areas.



Pair operation (2 AirOdor) per living area

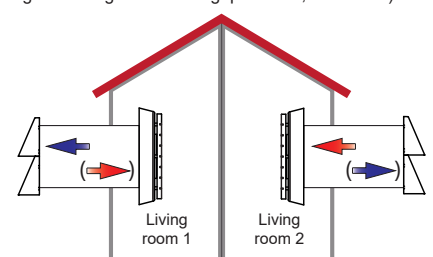
The main control synchronises volume flow rates, as well as air flow direction of the two AirOdor units in a single living area. There is no under/overpressure created.



Pair operation (2 AirOdor) for two living areas

The main control synchronises volume flow rates, as well as air flow direction of the two AirOdor units in each respective living area. There is no created under/over pressure.

(Be sure to supply adequate cross-flow possibilities between the living areas. e.g. a min door gap of 1 cm, flow ducts)



Control

With the control unit, a maximum of 3 AirOdor units can be controlled in single or pair mode with a supply/extraction-air mode. The control unit is to be installed in a switch box (Ø 60 mm) with a minimum depth of 75 mm. The max. Control cable length from the controller to the AirOdor devices is 10 meters.

The following fan levels can be switched::

- AirOdor with base load (approx. 12 m³/h)
- AirOdor with airflow volume level 15 m³/h
- AirOdor with airflow volume level 28 m³/h

Adjustment of the airflow volume levels 15 and 28 m³/h are possible by means of the potentiometer on the control unit (approx. +/- 10%).

Settings / coding dip switches:

DIP-switches	function	DIP switch setting	
		OFF (down) *)	ON (up)
1	Clocking	60 sec.	45 sec.
2	Single / pair operation	individual operation	pair operation
3	Basic ventilation via coding	off	on
4	Acoustic filter monitoring **)	off	on
5	Volume at terminal Z/A	15 m³/h	28 m³/h
6	Function terminal „Z/A“	supply air	exhaust air
7	Number AirOdor - Units	2	3
8	not used	---	---

*) Default setting

**) Reset function only via switch input S1/S2



Clocking

The clocking of 45 or 60 seconds for the reversing air supply / extraction mode can be adjusted.

Single / Pair operation

Only plays a role when two or three AirOdor units are being controlled by one control unit. With the „single operation“ setting, both devices run synchronously on air supply or extraction mode. For „pair operation“, one unit runs in supply mode while the other runs in extraction mode, i.e. always in opposition.

Basic ventilation via coding

Permanent or switchable basic ventilation is possible by means of coding the control unit.

Temperature sensor

In connection with the PT terminal assignment (on the control unit) and an AirOdor/PT fan unit, an automatic temperature-controlled 15 second lowering of the set clocking time can be effected.

The clocking time change takes effect if the supply air temperature falls below 16°C. A temperature measurement is made every 10 minutes.

Acoustic filter monitoring

Selectable, time-controlled filter monitoring with acoustic signalling.

Volume at terminal Z/A

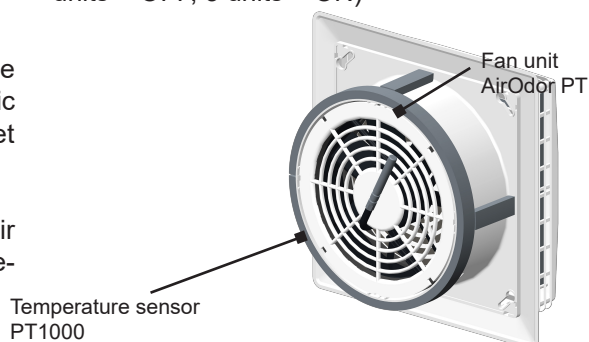
Only for „supply or exhaust air“ with an airflow rate of 15 or 28 m³/h in connection with the terminal assignment (on the control unit).

Function terminal „Z/A“

Dip switch 6 indicates whether the supply operation or the exhaust operation is switched via the terminal input.

Number AirOdor - Units

About the DIP switch 7 is used to set the number of AirOdor devices, which are controlled by this control. (1 or 2 units = OFF, 3 units = ON)

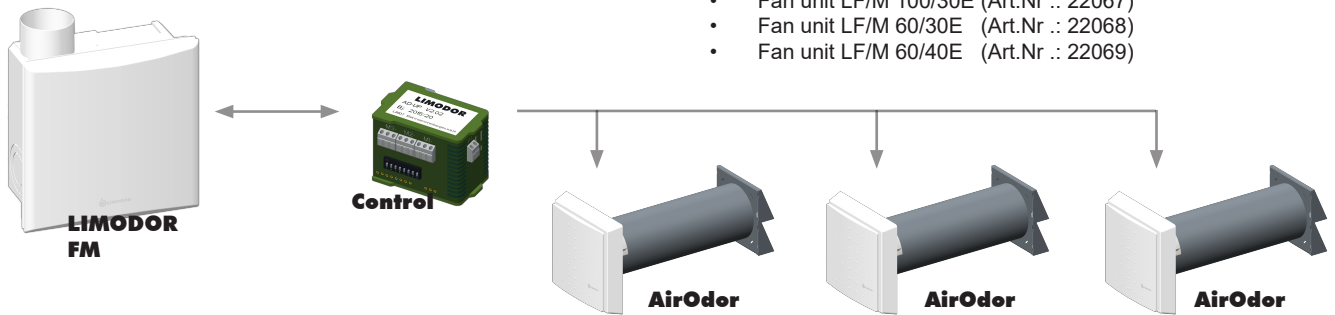


Combination with single tube ventilation systems

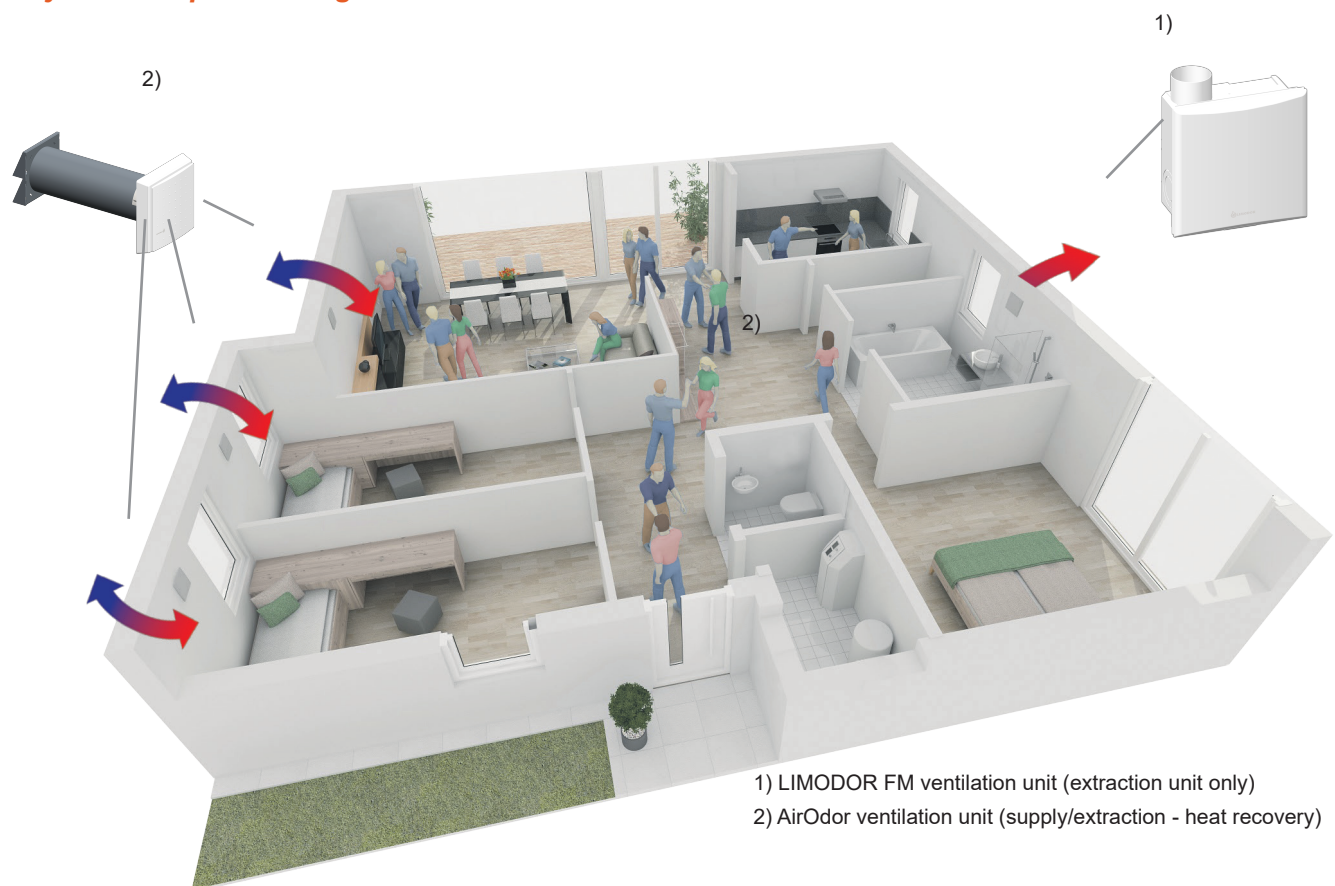
In combination with the LIMODOR FM single tube ventilation system, the AirOdor provides a perfect complement. With a fully optimised AirOdor control unit and parallel running fans from LIMODOR FM, it is possible to extract air (with locational placements) from for example, bathrooms or toilets.

In combination with the AirOdor, the LIMODOR FM fan must use the following fan units: (only this!)

- Fan unit LF/M 100/30E (Art.Nr. : 22067)
- Fan unit LF/M 60/30E (Art.Nr. : 22068)
- Fan unit LF/M 60/40E (Art.Nr. : 22069)



Layout example of living area air ventilation



Combining the AirOdor heat recovery units with one or more conventional extraction units is no problem at all. On the contrary, in such a composition, the AirOdor provides the necessary air supply when turning up the air extraction unit. During the entire operative duration of the extraction unit, the AirOdor units operate in air supply mode.

Example:

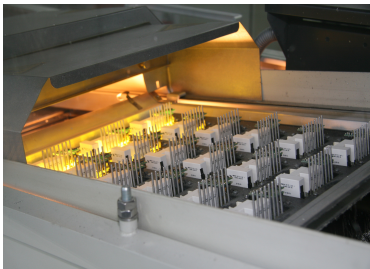
- LIMODOR FM in the bathroom
➡ 100 m³/h
- AirODOR in the livingroom
➡ 28 m³/h
- AirODOR in the bedroom-1
➡ 28 m³/h
- AirODOR in the bedroom-2
➡ 28 m³/h

LIMODOR

AirClean
AirOdor
AirOnova
AirVital
AirBase
AquaVent
Limax

QUALITY MADE IN AUSTRIA

In previous years, LIMOT demonstrated technical innovation-strength, which reflects on our LIMODOR products. LIMODOR - products are made of superior material and rigorously tested before distribution. The test results are monitored externally by TÜV, ÖVE and VDE.



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