Residential ventilation unit with Heat recovery

Ventilation systems with heat recovery offer users a high degree of living comfort thanks to temperature controlled and clean air. Heat recovery units are ideal for homes, for these owners who are looking for high performance and maximum comfort.
Residential ventilation unit with heat recovery. Fresh filtered air and high energy savings

The heat recovery ventilation unit is designed not only to provide good indoor air quality, but it is also designed to recover heat that would otherwise be lost throughout ventilation. These heat recovery ventilation systems are used in low energy homes to assist in the retention of heat.

1. **High indoor air quality**
The unit is designed to provide fresh filtered air into the home, while keeping a high thermal comfort.

2. **Energy saving**
Most of the energy from the exhausted air is used to precondition the incoming air, leading to lower heating requirements in the building.

3. **Space saving**
The compact ventilation unit can be installed over the DHW square tank or the Aquarea All-in-one Compact indoor unit for a space-saving solution.

4. **Better user interface**
The Residential ventilation unit and the Aquarea heat pump can be controlled with one single user-friendly controller.

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**How Panasonic contributes to Nearly Zero Energy Buildings (NZEB)**

**Panasonic is committed to develop products with greater energy efficiency.**

Our expertise gained over the years has helped to launch a range of products that contribute to a more carbon-free society.

Highly efficient Panasonic solutions can help to significantly reduce the energy consumption of the house:

- Aquarea High performance heat pump for heating, cooling and domestic hot water production
- Aquarea Smart Cloud, for energy monitoring
- Heat recovery ventilation system
- PV panels to produce renewable energy on-site
The Residential ventilation unit with Heat recovery provides fresh filtered air into the house whilst retaining most of the energy that has been used in heating the house.

Main features of the Residential ventilation unit
- Designed for areas up to approximately 140 m².
- High energy-efficiency rotary heat exchanger with EC - technology fans
- Moisture transfer function to minimize condensation in supply air during wintertime
- The built in humidity sensor in extract air can be used for demand control.
- Control via touch display and Startup Wizard for easy commissioning
- Modbus communication via RS-485
- Option to control an Aquarea H or J generation heat pump from PAW-A2W-VENTA control panel (PAW-AW-MBS-H and PAW-VEN-ACCPCB required)

Control user-friendly interface
All settings and features accessible via a control panel, integrated into the front cover. The option for connecting one or more external control panels is available.

- Color touch screen with a user-friendly interface
- MANUAL and AUTO mode or choose preferred settings from the pre-configured user modes
- If Aquarea H and J series heat pumps are connected with PAW-A2W-VENTA, the heat pump control options appear on the home screen in a separate tab

How to integrate an Aquarea heat pump with the residential ventilation unit.

Combine the Residential ventilation unit with Panasonic Aquarea for an space saving and highly efficient solution for heating, cooling, ventilation and DHW.

The unit can be mounted on a PAW-TA20C1ESC, on a WH-ADC0309J3ESC or installed on the wall (PAW-VEN-WBRK is needed).
Heat Recovery Ventilation unit

Heat Recovery Ventilation unit

<table>
<thead>
<tr>
<th>Specification</th>
<th>PAW-AZW-VENTA-R</th>
<th>PAW-AZW-VENTA-L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal airflow rate m³/h</td>
<td>204 @ 50 Pa</td>
<td>292 @ 100 Pa</td>
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<tr>
<td>Maximum airflow rate m³/h</td>
<td>1,24 @ 204 m³/h</td>
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<tr>
<td>SPF</td>
<td></td>
<td>84 %</td>
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<tr>
<td>Heat exchanger rotor drive type</td>
<td>Variable speed</td>
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<tr>
<td>Exchanger type</td>
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<td>Power supply V / Hz</td>
<td>230 / 50 / 1 phase</td>
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<tr>
<td>Energy Class, basic unit</td>
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<td>A</td>
</tr>
<tr>
<td>Energy Class, unit with local control on demand</td>
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<td>A</td>
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<tr>
<td>Noise level dB</td>
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<tr>
<td>Dimensions (W x H x D) mm</td>
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<tr>
<td>Weight kg</td>
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<td>Mounting position</td>
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<td>Supply side</td>
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<td>Left</td>
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<tr>
<td>Duct connections mm</td>
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<tr>
<td>Filter class, supply air</td>
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<tr>
<td>Filter class, extract air</td>
<td>M5/ePM10 50 %</td>
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<tr>
<td>Minimum outdoor temperature °C</td>
<td>-20</td>
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</tbody>
</table>

* Heat recovery efficiency according to EN 13141-7. ** Heat Recovery Ventilation unit is produced by Systemair & Square tank by AEmail

Find more information about the Residential ventilation unit in www.panasonicproclub.com

Accessories (optional)

- **PAW-VEN-DPL**: Additional touch control panel. White frame (cable must be ordered separately).
- **PAW-VEN-CBLEXT12**: Cable with plug for electrical connection between unit and control panel, type CE and CD (12 m).
- **PAW-VEN-DIVPLG**: Twin plugs for installation of several control panels type CD or CE for one unit.
- **PAW-VEN-DPLBOX**: Touch control panel wall-mounted kit.
- **PAW-VEN-S-CO2RH-W**: CO₂ RH wall-mounted sensor.
- **PAW-VEN-S-CO2-W**: CO₂ wall-mounted sensor.
- **PAW-VEN-FLTKIT**: Supply and extract filters kit.
- **PAW-VEN-ACCPCB**: Optional PCB for additional functions.
- **PAW-VEN-WBRK**: Wall bracket kit for stand-alone installation on the wall.
- **PAW-VEN-PTC08**: 0,8 kW PTC heater DN125.
- **PAW-VEN-S-CO2-D**: CO₂ duct sensor.
- **PAW-VEN-ACCPCB**: Optional PCB for additional functions.
- **PAW-TA20C1ES**: Square DHW tank. Compact dimensions (1550 x 600 x 600). The ventilation unit can be mounted on the tank.