New construction and renovation - housing - office buildings - residential homes - schools - Kindergartens - medical practices - Clinics

SMART RONDO HRV
Product information
Technical data
The Series **SMART RONDO HRV** differs in many functions from conventional and frequently offered WRG systems. In particular, the invisible mounting design LAL is used whenever the demands of our customers or technically defined requirements of standard solutions do not promise a satisfactory ventilation solution.

The features at a glance: very low noise level - high sound insulation against noise from the outside - intelligent control (aligned according to user requirements) - numerous mounting versions - inconspicuous façade closers - technically and optically compatible with other Ventomaxx® International series - designed for variable use within ventilation concepts - easy to retrofit - long lasting components - **MADE IN GERMANY**

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**Energy efficient ventilate with Ventomaxx® International**

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</table>
The residential ventilation units with heat recovery of the SMART RONDO HRV series are usable more versatile than in the living area. They stand for a variety of solutions and fields of application. So plan your ventilation concepts in no time and at the highest ventilation level. Below we will briefly present the most common types of devices for wall-integrated installation using two mounting versions. Further possibilities are available.

The particularly compact unit dimensions are suitable for installation in almost all exterior walls in new construction and refurbishment; The modular device concept is always expandable.

The intelligent control system has been designed for flush mounting and is designed as residential ventilation optimally to the specifications of the EnEV. The user operation is performed intuitively via the room control unit.

In line with the currently valid planning guidelines and standardization, the regulation coordinates the air exchange of an entire control zone across the rooms, and intelligently integrates internal corridors into the ventilation concept. The WRG units can be operated particularly comfortably and economically thanks to the additionally extended humidity monitoring, in the sense of the new ecodesign directive, and achieve the energy efficiency class A at more than 90% heat recovery level. Unnecessary ventilation heat losses can thereby be effectively avoided and valuable primary energy saved.

SMART RONDO HRV

Energy Efficiency Ventilation units with heat recovery for supply- and exhaust air ventilation of living rooms, offices, etc

The particularly compact unit dimensions are suitable for installation in almost all exterior walls in new construction and refurbishment; The modular device concept is always expandable.

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SMART RONDO HRV
Energieeffizientes Lüftungsgerät mit Wärmerückgewinnung

1. Stainless steel facade border
   - Type FA LAW-K (w), H x W x D ~ 22 x 20 x 4 cm
   - with condensate drain and air louver
   - available in stainless steel, natur (or white painted, similar RAL 9016)
   - optional plastic mesh for undemanding application

2. Rogh construction-Ringmodul-Set (RS-LAW)
   - for Wall thickness from 295 mm
   - with VLE-Ringmodul expanded as desired
   - with optional mounting types adaptable to the architecture

3. Energy-efficient ventilation unit
   - particularly quiet operation, from ca. 17.5 dB(A)
   - high air capacity up to 60 m³/h

4. High performance heat exchanger
   - with hexagonal honeycomb structure
   - Heat recovery rate above 90 %

5a. Hygiene-filter
   - sas standard equipped with G3
   - Allergy / pollen filter F6 optional

5b. Hygiene-Feindust filter
   - optional retrofittable, highly efficient fine dust filter separation quality PM 2.5

6. SMART Design-Cover
   - thermally insulated with sound insulation function, smallest dimension (20x20 cm), toolless revision and filter changes

› CR-SMART
CR-SMART (central control)

- Operating up to 4 (6) Units with one controller
- demand driven choice for 5 power level
- Integration of external sensors (e.g. Hygro, CO₂)
- Filter Service life monitoring
- parallel device connection / low voltage
- Ventomaxx-Air-Balance-System (automatic air balancing during operation of an additional exhaust fan.)

Highest sound insulation in mounting type LAW, straight through the wall.

Highest sound insulation in mounting type LAL, concealed in the reveal.
SMART RONDO HRV
Energy-efficient ventilation unit with heat recovery

1. Aluminium-Facade cover
   - Type FA Lax 37 (w), H x W x D 255 x 37 x 7 mm
   - with condensate drain and insect protection
   - available in Alu-natur (or white powder coated, similar RAL 9016)

2. Rogh construction ring module set (RS-LAL)
   - Standard length 330 mm, with VLE-Ring module desired expendable
   - Flat duct X-Diameter 500 mm, adjustable
   - with optional mounting types can be flexibly adapted to the architecture

Key benefits at a glance

› Fresh air and moisture protection around the clock
› Ventilation with the windows closed for best intrusion protection and insect repellent
› Protection against Feindust /Allergenic-pollen guard
› Moisture protection and building maintenance
› in winter: high saving of primary energy
› in Sommer: optimum reduction of heat loads
› quiet and energy saving EC-Fans
› integrated noise protection
› optimal air hygiene / easy operation
› duct free and tosolve Installation / Maintenance
› HEX-Ceramik heat exchanger > 90%
› high efficient flow straightener
› Plug & Play / SMART System is immediately ready for operation
› for new construction and renovation | all wall constructions
› durable device components and high-quality materials such as ABS, stainless steel or aluminum guarantee maximum longevity

Made in Germany
highest operating comfort • best Energy efficiency • Future-proof and expandable • highest Quality • Made in Germany
SOUND PROTECTION UP TO 48dB

A comfortable ventilation device should not only be quiet, but also protect the privacy of the outside noise. This depends on every dB, as in the practical perception the improvement of the noise protection corresponds to 3 dB, quasi a “halving of the traffic volume”!!

Operating
17.5 dB(A)

Our 5-stage control offers you fine dosage possibilities. In air output between approx. 17 and 60 m³/h. The first two power stages are far below 30 dB (A) and are therefore even suitable for sleep and resting rooms. DIN 4109 is most suitable.

IC INTELLIGENT

POWER SAVINGS 1.9 WATT

The Ventomaxx® International series SMART RONDO HRV is equipped with state-of-the-art EC fan technology. These are characterized by their extreme economy and longevity. SMART RONDO HRV appliances meet the energy efficiency class A.

90% HEAT RECOVERY

With a heat recovery rate of more than 90%, our high-performance hexagonal heat exchangers recover their valuable primary energy.

At the same time, the outside air will warmed from 0°C up to +17 °C at without electrical re heater.

ECO ENVIRONMENT FRIENDLY

Ventomaxx® International stands for ecology, noise protection, sustainability and environmental benefits.

WRG systems world-wide in the top positions. This allows you to meet the requirements of the energy saving regulation (En-EV) in a playful way and also save valuable energy.

› PRODUCT FEATURES AND BENEFITS

intelligent control/ regulation

With the CR-SMART, you have a unique control. In addition to the comprehensive control functions in the WRG operation, it also manages the air balance when an additional exhaust air fan is connected. This is of particular importance for balanced air volume flows.

The advantages:

- Comfort- and energy saving ventilation devices
- Quiet ventilation from 1,9 Watt
- Efficiently heat recovery
- Longevity and high performance
- Quiet, eco-saving operation
- Simple installation
- Comprehensive control functions
- Flat ventilation system
- Comfortable ventilation at home

Privatsphäre schützen

comfortable operate

umweltfreundlich handeln

energy efficient ventilate
With the **CR-SMART**, you have a unique control. In addition to the comprehensive control functions in the HRV operation, it also manages the air balance when an additional exhaust air fan is connected. This is of particular importance for balanced air volume flows.

### The principal

The **CR-SMART** regulates and controls the **SMART RONDO** HRV Air Balance System.

The device group is controlled via the room operating unit **CR-SMART**. Up to 6 **SMARTRONDO HRV** (including optional expansion module) can be installed in one control group. Preferably, this system is used in a new building or a large renovation.

The **CR-SMART** incorporates a specially developed room air management and aims at a balanced air balance in connection with a bath exhaust fan.

The program intelligence, when connected to the **CR-SMART**, automatically registers an exhaust fan in the control group and takes over the air-balance function. The Air Balance function works preferably and without errors with the devices of Ventomaxx-International.

### Program function

Four device functions are available as usable programs and ensure high comfort. This provides the right ventilation solution for most air supply situations.

The function of the **CR-SMART** can be performed with different **SMART** sensors, e.g. Humidity and / or **CO2** sensors. The **CR-SMART** automatically detects the connection of a **SMART** sensor and integrates it into the stored program functions.

**The main function:**
- Program- HRV-ventilation
- Program Cross ventilation
- Program dehumidification (with optical sensor)
- Party function

**Additional Sensors (optional):**
- Dehumidification sensor (1600-1820VX)
- **CO2** (1600-1821VX)

### CR_SMART Air Balance System

When using an exhaust fan, in conjunction with the **CR-SMART**, all **SMART RONDO HRV** unit units [Art.-No.: 1600-1800VX], which are in the exhaust mode, are automatically reduced in air output. The **SMART RONDO HRV** unit units [Art.-No.: 600-1800VX] in the supply air mode continue to operate in the current, preselected, fan stage.

Depending on the fan speed change cycles of the devices pairs (push / pull) in the respective function are adjusted. In order to achieve maximum heat recovery, an average length of stay is thereby optimized in heat exchangers for thermal charge / discharge. i.e.:  

- Low air output => long cycles
- High air output => reduced cycles
Device components
SMART-RONDO HRV/ LAW

The entire ventilation system has a modular design and can therefore be configured according to the task position. The following modules / sets can be ordered in line with the assembly steps.

<table>
<thead>
<tr>
<th>Device unit / final assembly set</th>
<th>SMART RONDO HRV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consisting of SMART-Design Room cover with G3 Hygiene filter, fan-system support unit incl. flow rectifier and protective grille, high-performance ceramic heat exchanger having a hexagonal honeycomb structure.</td>
<td>Art.-No.: 1600-1800VX</td>
</tr>
<tr>
<td></td>
<td>Sound protection 41 dB,</td>
</tr>
<tr>
<td></td>
<td>ZS-Fan conector</td>
</tr>
<tr>
<td></td>
<td>Art.-No.: Z-1000-0156</td>
</tr>
</tbody>
</table>

Rough Construction Ring Module

Building physics optimized, thermally insulated pipe system made of PS / PC-ABS, with integrated clamping pockets, VLE-centering and assembly protective cover. Length 300 mm, can be extended / shortened

Additional module for outdoor air filter PM 2.5 Required if the filter is to be placed directly in the fresh air intake. Consisting of: 
VLE 150 & Fein dust filter PM2.5

<table>
<thead>
<tr>
<th>Facade cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>FA-LAW-K</td>
</tr>
<tr>
<td>Art.-Nr.: 1500-4000VX</td>
</tr>
<tr>
<td>FA-LAW-K w (white)</td>
</tr>
<tr>
<td>Art.-Nr.: 1500-4010VX</td>
</tr>
<tr>
<td>GI 150 (white)</td>
</tr>
<tr>
<td>Art.-Nr.: 1100-1103DO</td>
</tr>
</tbody>
</table>

Facade cover in high-quality stainless steel version (optionally powder-coated white, similar to RAL 9016 incl. Air / Condensate Conduction Lamella Measurements H / W / D: 220 / 200x45 mm

ABS plastic grid 200 mm, with a mating flange, 150mm; Inexpensive façade closure / weather protection grille for insensitive façade systems; color white

Controller

Central control unit for parallel control of 2-4 HRV units per control zone. Optionally expandable with Art. No.: 1600-1815VX for 6 Units Demand controlled operation with 4 power levels

| CR-SMART |
| für 4 HRV Units |
| Art.-No.: 1600-1810VX |
| CR-SMART Expansion module 6 HRV Units |
| Art.-No.: 1600-1815VX |

Replacement filter

Original Ventomaxx hygiene filter Tool-free interchangeable

Take care of your health and use only VOC-tested original filters

| Hygiene filter G3 |
| Art.-No.: 1500-1920VX |
| Fein dust filter PM2.5 |
| Art.-No.: 1500-1925VX |

Additional accessories for specific projects on request. / after technical clarification.
## TECHNCAL DATA

<table>
<thead>
<tr>
<th>Technical data</th>
<th>SMART RONDO HRV/ LAW</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Series / device version</strong></td>
<td>SMART Rondo HRV / LAW</td>
</tr>
<tr>
<td><strong>Control / Operation</strong></td>
<td>CR-SMART/ central controll</td>
</tr>
<tr>
<td><strong>Power levels preselectable</strong></td>
<td>1</td>
</tr>
<tr>
<td><em><em>Air flow filter</em>/ quality</em>**</td>
<td>**</td>
</tr>
<tr>
<td>Air power level 1</td>
<td>17 m³/h</td>
</tr>
<tr>
<td>Air power level 2</td>
<td>42 m³/h</td>
</tr>
<tr>
<td>Air power level 3</td>
<td>50 m³/h</td>
</tr>
<tr>
<td>Air power level 4</td>
<td>58 m³/h</td>
</tr>
<tr>
<td><strong>Heat recovery rate</strong></td>
<td>&gt; 90 %</td>
</tr>
<tr>
<td><strong>High-performance heat exchanger</strong></td>
<td>HEX renewable</td>
</tr>
<tr>
<td><strong>Fan type</strong></td>
<td>EC, axial, digital</td>
</tr>
<tr>
<td><strong>Power consumption (Fan level min - max)</strong></td>
<td>1,4 – 3,4 Watt</td>
</tr>
<tr>
<td><strong>Power supply (control), bei 50 Hz (international wide range)</strong></td>
<td>85 – 260 Volt – AC</td>
</tr>
<tr>
<td><strong>Operating voltage (station)</strong></td>
<td>12V DC</td>
</tr>
<tr>
<td><strong>power connection</strong></td>
<td>electricity supply system</td>
</tr>
<tr>
<td><strong>Sound pressure</strong></td>
<td>~ 18 – 42 dB</td>
</tr>
<tr>
<td><strong>Sound insulation (outside noise)</strong> <strong>(Norm sound difference)</strong></td>
<td>45 dB, (D_{\text{new}}) (acc. certification Z03, RONDO IQ)</td>
</tr>
<tr>
<td><strong>Energy efficiency class</strong></td>
<td>A</td>
</tr>
<tr>
<td><strong>Filter (PM2.5 optional)</strong></td>
<td>Hygienefilter G3/ PM2,5</td>
</tr>
<tr>
<td><strong>Design-cover SMART 160 roomside</strong> <strong>(similar RAL 9003)</strong></td>
<td>ABS white</td>
</tr>
<tr>
<td><strong>Housing dimensions HxWxD</strong></td>
<td>ca. 200x200x12 mm</td>
</tr>
<tr>
<td><strong>Facade cover</strong> <strong>(conform to the system made of stainless steel; Other solutions for request)</strong></td>
<td>optional, Color acc. choice</td>
</tr>
<tr>
<td><strong>Nominal length</strong> <strong>(with optional additional module) VLE 150)</strong></td>
<td>300 mm (380 mm)</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>ca. 3 – 4 kg</td>
</tr>
</tbody>
</table>

Your SMART RONDO HRV system is equipped with a closed-cell and especially hygienic heat exchanger. Despite the ideal dehumidifying performance, this does not dry out your living space. It thus provides the necessary health for the human being (mucous membranes) and also protects your precious furniture and wooden floors.

All SMART RONDO HRV units are already equipped with a G3 hygiene filter at the factory. For allergy sufferers and very high particulate matter loadings, special pollen filters / fine dust filters are available in PM2.5 quality. The inspection of all air-conducting components with filters is possible without the use of tools.

---

* air technical optimised
** measured surface sound pressure level, Lpf measurement in exhaust air operation according to the protocol TÜV SÜD
** measured acc. EN 140-10 / EN ISO 140-2/EN ISO 717, acc. certificate ift-Rosenheim
Device components
SMART RONDO HRV/ LAL

The entire ventilation system has a modular design and can therefore be configured according to the task position. The following modules / sets can be ordered in line with the assembly steps.

### Device unit / final assembly set

Consisting of SMART-Design Room cover with G3 Hygiene filter, fan-system support unit incl. flow rectifier and protective grille, high-performance ceramic heat exchanger having a hexagonal honeycomb structure.

SMART RONDO HRV
- Art.-No.: 1600-1800VX
- Sound protection 45 dB,
  - Increasing as an option
  - + 1 SD160 = 47 dB, Dnew
  - + 1 SD160 + 1 SD150 = 48 dB, Dnew

ZS-Fan conector
- Art.-No.: Z-1000-0156

### Rough construction Ring Module

Building physics optimized, thermally insulated pipe system made of PS / PC-ABS, with integrated clamping pockets, VLE-centering and assembly protective cover.
Length 330 mm, can be extended / shortened

Additional module for outdoor air filter PM 2.5
Required if the filter is to be placed directly in the fresh air intake. Consisting of:
- VLE 150 & Fein dust filter PM2.5

RS-LAL 50 LEFT
- Art.-No.: 1600-2115LI

RS-LAL 50 RIGHT
- Art.-No.: 1600-2125RE

FDF2.5
- Art.-No.: 1700-1920VXI

### Facade cover

System conformer facade connecting in high-quality stainless steel design (optional white powder coated, similar, RAL 9016) incl. stainless steel screws

Dimensions H / W / D: 255/37x7 mm

FA-LAx 37
- Art.-No.: 1500-4100VX

FA-LAx 37 w (white)
- Art.-No.: 1500-4110VX

### Controller

Central control unit for parallel control of 2-4 HRV units per control zone. Optionally expandable with Art. No.: 1600-1815VX for 6 Units

Demand controlled operation with 4 power

CR-SMART
- für 4 HRV Units
- Art.-No.: 1600-1810VX

CR-SMART Expansion module 6 HRV Units
- Art.-No.: 1600-1815VX

### Replacement filter

Original Ventomaxx hygiene filter

Tool-free interchangeable

Take care of your health and use only VOC-tested original filters

Hygiene filter G3
- Art.-No.: 1500-1920VX

Fein dust filter PM2.5
- Art.-No.: 1500-1925VX

Additional accessories for specific projects on request / after technical clarification.
### Technical data
**SMART RONDO HRV / LAL**

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<th>Series / device version</th>
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#### Air flow filter*/ quality*

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<th>PM2.5</th>
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</tr>
<tr>
<td>Air power level 4</td>
<td>58 m³/h</td>
<td>35 m³/h</td>
</tr>
</tbody>
</table>

#### Power consumption (Fan level min - max)

- 1.4 – 3.4 Watt
- 2.0 – 9.0 Watt

#### Power supply (control), bei 50 Hz (international wide range)

- 85 – 260 Volt – AC

#### Operating voltage (station)

- 12V DC

#### Sound pressure

- ~ 18 – 42 dB

#### Heat recovery rate

- > 90 %

#### High-performance heat exchanger

- HEX renewable

#### Fan type

- EC, axial, digital

#### Energy efficiency class

- A

#### Filter (PM2.5 optional)

- Hygienefilter G3 / PM2.5

#### Design-cover SMART 160 roomside (similar RAL 9003)

- ABS white

#### Housing dimensions HxWxD

- ca. 200x200x12 mm

#### Facade cover (conform to the system made of stainless steel; Other solutions for request)

- optional, Color acc. choice

#### Nominal length (with optional additional module) VLE 150

- 330 mm (380 mm)

#### Weight

- ca. 3 – 4 kg

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* The appropriate rough construction opening (approx. 185 - 200 mm) is to be determined by the project (round or square) in such a way that it is always adequately covered by the selected device cover during final assembly. We will be pleased to provide you with the necessary dimension drawings on request.

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* All SMART RONDO HRV units are already equipped with a G3 hygiene filter at the factory. For allergy sufferers and very high particulate matter loadings, special pollen filters / fine dust filters are available in PM2.5 quality. The inspection of all air-conducting components with filters is possible without the use of tools.

* Your SMART RONDO HRV system is equipped with a closed-cell and especially hygienic heat exchanger. Despite the ideal dehumidifying performance, this does not dry out your living space. It thus provides the necessary health for the human being (mucous membranes) and also protects your precious furniture and wooden floors.
We would be pleased to advise you personally or through our respective country partners and assist you with the planning and realization of your ventilation concept. For more information, visit www.ventomaxx-international.com

The information in this brochure is provided in good faith and are intended to give you a hands-on assistance with your plans. However, we ask for your understanding if we make these documents available without legal liability. For all our business relations, the general terms and conditions of business of Ventomaxx® International GmbH as amended apply. Reserve technical changes.

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