

# Breathe Fresh Air at Home

Residential Ventilation



We eat and drink around 4 kg per day and breathe around 12,000 litres (15 kg) of air every day. 90% of that is indoor air. Even so, the quality requirements for food and drink are much more stringent than the requirements for the air we breathe.

90%



Buying an orange is easy. You know it's good for you. It radiates freshness and wholesomeness, you could say. You can also smell it and taste it. And you can tell straight away if it's rotten. But when it comes to indoor air quality (IAQ) at home, things aren't quite so straightforward.

Of course you know, deep down inside, that air is important. But you can't take hold of it, and it can be difficult to feel if it is bad. That's why indoor air is rarely high up on families' wish lists, although really it should be. That's the major challenge we face here at Systemair. Because we provide fresh, environment friendly, energy-efficient ventilation that promotes the wellbeing of you and your family.



# Lots of people believe the air in their homes is good ...

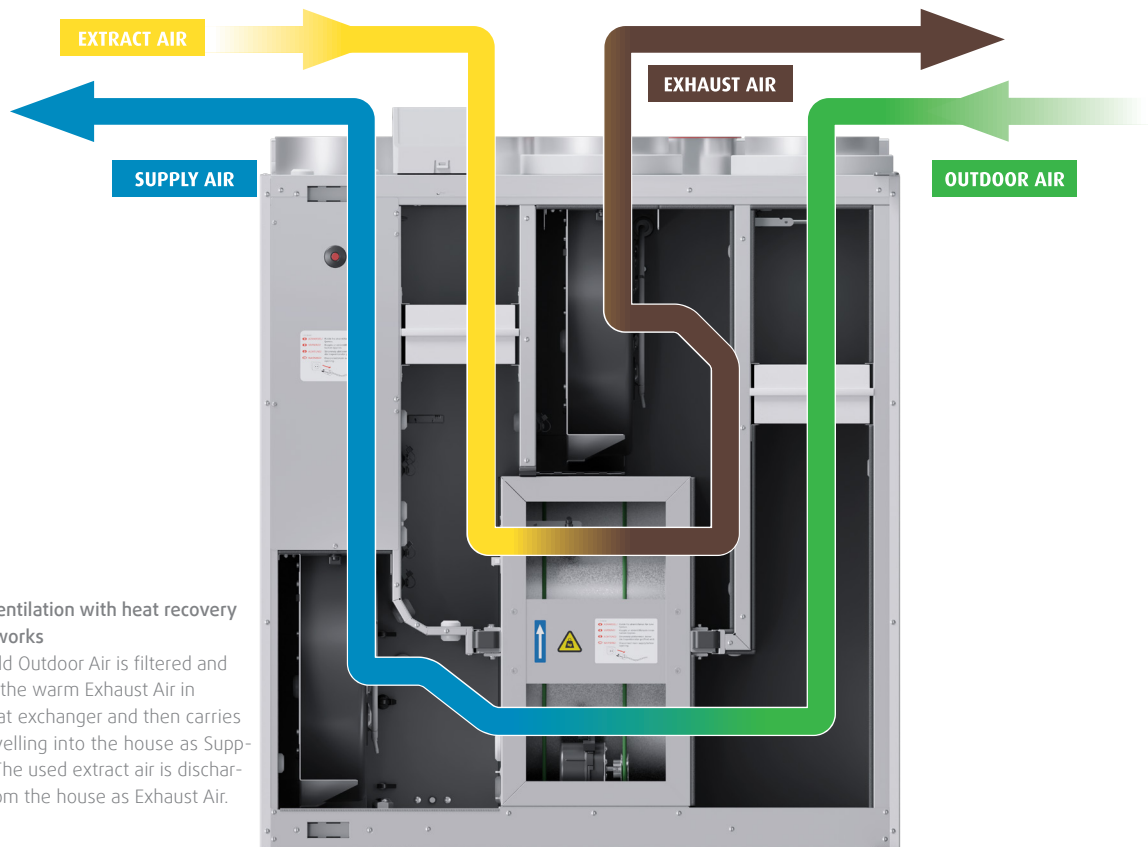
... but far too frequently, the air in our homes is even worse than the air out on the street. Research and studies show that in our major cities, there can be as much as 2 to 10 times\* more contaminated air indoors than outdoors. In turn, this can lead to asthma, allergies and even lung cancer. Quite simply, we need fresh air if we are to feel great. Many homes are unable to guarantee healthy indoor air. Rather worryingly, not many residents realise just how serious the situation is.

Elevated radon values in indoor air can be traced directly back to outdated ventilation solutions that are incapable of removing contaminated air from the home. In some cases, the situation is even made worse by the old ventilation. Every year, a large number of people all over the world are affected by lung cancer as a consequence of exposure to radon.

\*Source: The Environmental Protection Agency (EPA)

## Residential ventilation that saves energy

Ventilation with heat recovery (FTX) not only guarantees healthy air exchange in your home, but is also a healthy investment as it will reduce your heating costs and benefit both your pocket and the environment that we all share.



### How ventilation with heat recovery (FTX) works

The cold Outdoor Air is filtered and meets the warm Exhaust Air in the heat exchanger and then carries on travelling into the house as Supply Air. The used extract air is discharged from the house as Exhaust Air.

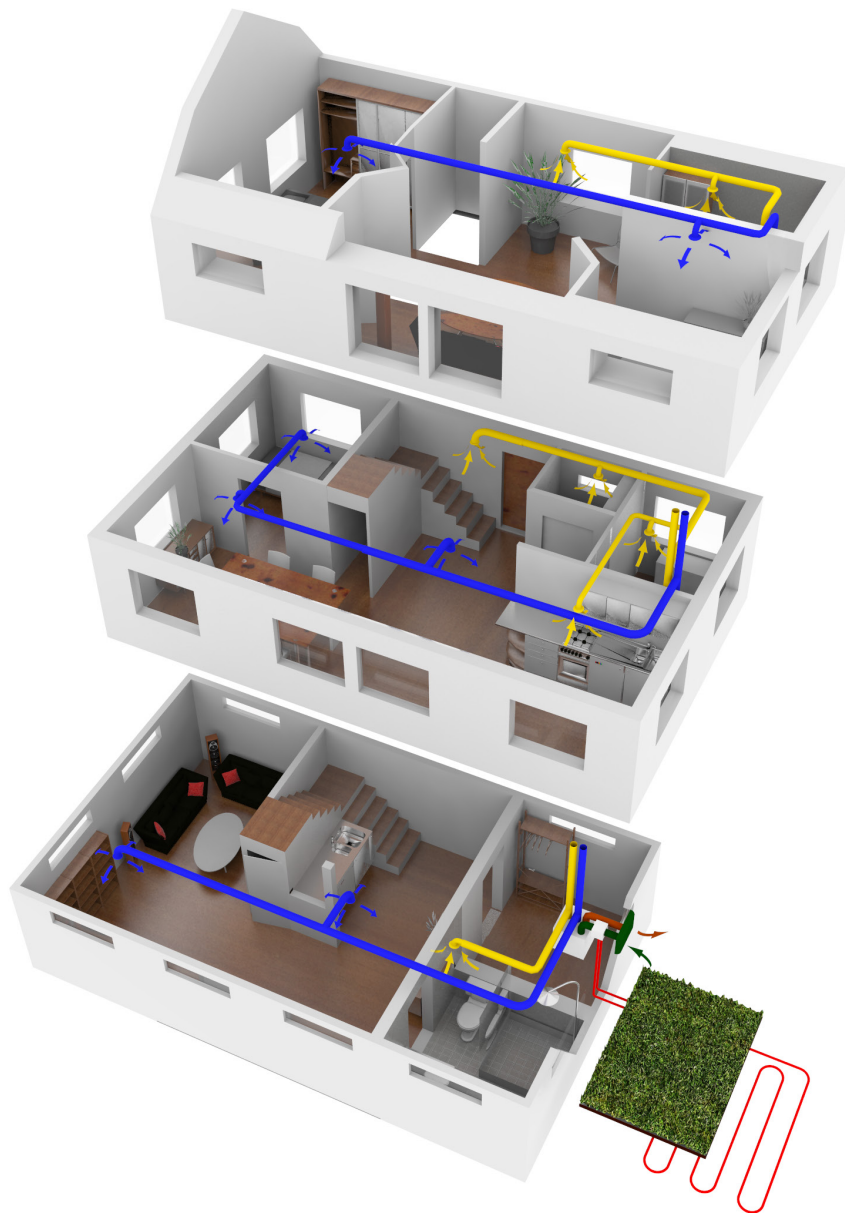
The United States EPA ranks indoor air quality as a top five environmental risk to public health. EPA studies found indoor air pollutants were generally 2 to 5 times greater than outdoor pollution levels. In some cases, indoor air pollution was 100 times greater.

5<sup>th</sup>



# Quality of life starts with the climate

## Residential ventilation by Systemair



### **This is how your controlled residential ventilation works:**

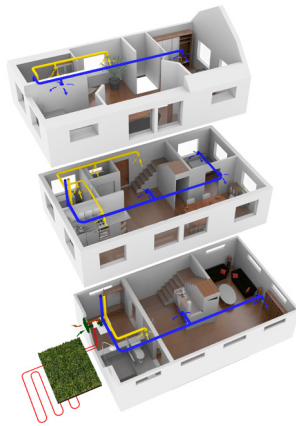
Using the rooms, kitchen, bathroom and toilet, your ventilation system removes waste air from inside. Depending on the system, a heat exchanger extracts the heat from used air and, at the same time, outdoor air is taken in and is filtered.

If necessary, the heat exchanger pre-temperes the cool outside air using heat from the waste air. The outdoor air then flows through the vents into the rooms. From there, the supply air flows through openings in the doors (door gap or grille) across the overflow area (corridor and floorboards) into the kitchen, bathroom and toilet. This way, the two different types of air don't mix.

**The result: an optimum air ratio and a pleasant room climate.**



# Perfectly in tune with your customers



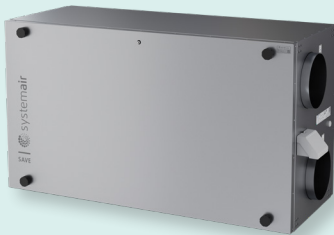
With SAVE Systems, your customers are constantly breathing outdoor air at home. Even with our basic configuration, they can enjoy the best climate conditions.

Comfort which can be improved on even further: with components which automatically manages the supply of outdoor air and save on energy too.

Could there be such a thing as too much convenience?

## SAVE VTR/VSR

Highly efficient residential ventilation with rotational heat exchanger



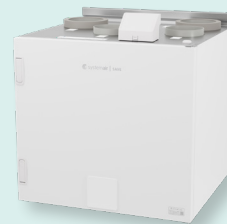
Your customers want maximum convenience with minimum heat loss? Then recommend them our rotational heat exchanger system. This extracts the heat from the waste air and pre-temps the cool outdoor air. Some of the humidity of the air is also recovered and transferred to the supply air. High-quality fine particle filters make sure the air stays pure.

### The benefits:

- Controlled outdoor air and ventilation
- Heat recovery degree of up to 85%
- Bypass function
- Extreme energy savings
- User-friendly
- Space-saving and quiet-running
- Allergy-friendly
- Humidity recovery, thus consistently pleasant indoor climate
- No condensation, thus connecting to the drains is unnecessary
- Frost protection is unnecessary (to as low as approx. -30°C)

## SAVE VTC/VSC

Highly efficient residential ventilation with counter flow heat exchanger



With a reverse flow heat exchanger your customers can achieve the highest degree of heat recovery. The system automatically switches between normal mode with heat recovery and summer mode without it. In summer a bypass function overrides the heat recovery. SAVE range offer both - condensation and enthalpy exchangers.

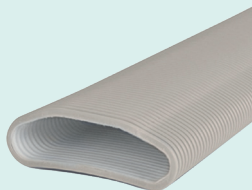
### The benefits:

- Controlled outdoor air and ventilation
- Heat recovery degree of up to 90%
- Enthalpy recovery degree of up to 80%
- Bypass function
- Automatic de-icing function
- Extreme energy savings
- Quiet-running
- User-friendly
- Optional fine particle filter



## Systemair duct systems

Extremely flexible



For whichever convenient ventilation system your customers chooses and regardless of their structural circumstances, with our ductwork systems you can rise to every challenge.

Whether from galvanised steel sheeting or polymer, whether round or oval, all pipes are extremely robust, resistant to deformation and, if necessary, easy to clean.

Your clients can make the selection and choose the size to meet their individual requirements. This guarantees the safe and economical distribution of air through the building.



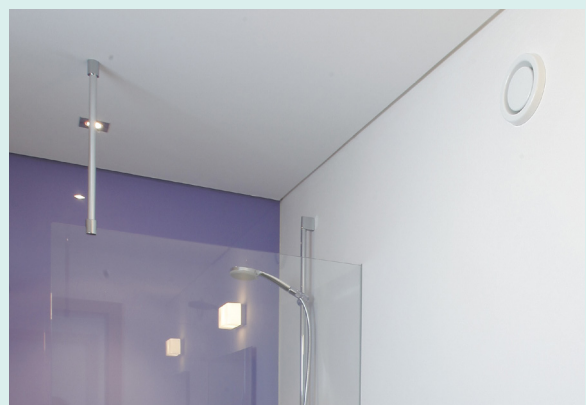
## Systemair air distribution products

Just your style



Do your customers prefer modern living? What about classical, maybe elegant or perhaps they prefer the style of the country house? Regardless of which fittings your clients like, they're bound to find the design they're looking for in our versatile range of high-quality ceiling and wall vents.

Simply show your customers the models in our catalogues or refer them to our website [www.systemair.com](http://www.systemair.com)





Children living in houses with poor ventilation are at up to twice as much risk of suffering from asthma and allergies, compared with children living in houses with good ventilation.

x2

# Environmental responsibility

The EU has pledged to reduce the use of energy in accordance with global climate targets, i.e. to reduce energy consumption by 20% by 2020 and 50% by 2050. To succeed in this, FTX ventilation and other measures are required in homes both old and new.

Here at Systemair we are aware of the responsibility we bear for our environment, and our primary contribution to modern environmental protection is efficient energy usage. You will encounter the Green Ventilation symbol in our product brochures – this indicates intelligent technology in harmony with the environment.

## Energy-efficient ventilation

To get the best possible indoor air, and indoor climate, you need optimal ventilation. And that is exactly what you get with SAVE from Systemair. SAVE is a series of efficient heat recovery ventilation units that are tailored for individual homes, smaller offices and similar premises.

All SAVE units fulfil the market's high demands for low energy consumption and sound levels. State-of-the-art EC technology ensures that the fans are energy-efficient and contribute to low SFP (Specific Fan Power) values and fulfills the requirement in the European Ecodesign directive. All units technical performance is certified by the independent certification program Eurovent.



SAVE ventilation units recover up to 90% of the heat in the exhaust air and are available in various sizes for living spaces of up to 600 m<sup>2</sup>.

## A healthier home for immediate delivery

All SAVE units are supplied preprogrammed, tested and ready to install, helping you to bring fresh air to your home more easily. Servicing and maintenance are facilitated thanks to readily accessible replacement components. We have units with rotary heat exchangers and counter-flow heat exchangers in sizes to suit living spaces of up to 600 m<sup>2</sup>.

These units are available with both top connection and side connection as standard for immediate delivery. Our heat recovery units can be positioned over stove, on wall, false ceiling or in the attic. The cold outdoor air is tempered and filtered so that the indoor climate is healthy and comfortable for you and your family, with no risk of draughts.

# SAVE Control System

Simplified connection, configuration and control

## SAVE control benefits:

- Flexible and freely configurable
- External connection board
- Integrated Modbus RTU for BMS/SCADA integration
- SAVE CONNECT 3.0 in standard delivery for remote control and commissioning on site.
- Selection of accessory User interfaces
  - SAVE TOUCH
  - SAVE LIGHT

The SAVE control system - standard platform for the SAVE model range.

SAVE devices are standardly equipped with SAVE CONNECT 3.0 Internet Access Module which enables remote control using SAVE CONNECT mobile app and WEB interface for easy device commissioning, control and troubleshooting without need for additional control panels or internet!

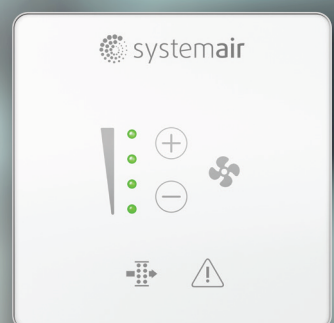
Internet connected SAVE devices can also be linked to SAVE PRO Cloud application. Systemair's offers convenience of remote and adaptable technical support, troubleshooting assistance, and the capability to monitor multiple devices—all seamlessly accessible through a unified interface.

We also offer options for control Interfaces – SAVE TOUCH for advanced users and SAVE LIGHT for very basic control and information.



## SAVE TOUCH

Advanced touch screen controller with intuitive and simple control interface. Simple unit configuration using Start Up Wizard, provides an option to monitor and control all unit parameters and offers an overview of alarm and data history.



## SAVE LIGHT

Simple control panel for basic control functionality, providing an option to reset filter timer and alarm indication.



### Systemair Services

Remote service of SAVE units and filter purchases.



### SAVE PRO

Professional users can monitor, commission and control their own and client SAVE units remotely using free and BMS like Portal.



### Mobile APP (Remote control)

The SAVE CONNECT mobile application offers full unit control and remote configuration functionality. The app completely eliminates the need for additional control panels, in addition offering a possibility for remote service and control of the unit.



### SAVE CONNECT Cloud

SAVE CONNECT reaches Homesolutions cloud services over your home internet gateway, that enables user not only to remotely control the unit, but also to receive unit software updates, access third party Smart Home platforms, remote technical service, filter purchase and more.



### Smart Home integrations

Link your SAVE unit to third party Smart Home platforms (Amazon, Alexa, Google home and IFTTT)

## CONTROL



### WEB Interface (Local control)

Connect to unit using your mobile device or Laptop over WLAN (WiFi) for easy commissioning or control of the SAVE unit. No Internet required



### SAVE CONNECT 3.0

Solution enabling the customer to remotely control the SAVE unit, manage unit configuration.



### Standard Modbus RTU

Freely configurable Modbus RTU over RS485 available for BMS integration.

### Connectors for external components

Connectors for external components (temperature, airflow control, safety, IAQ sensor, etc.) on the control units are clearly marked and grouped together to reduce installation and startup time. The external connection board simplifies accessory installation.

# Energy-efficient ventilation for all kinds of homes



The Eurovent-certified SAVE series includes a wide selection of energy-efficient ventilation units with modern designs to suit both houses and apartment blocks. All SAVE units surpass market requirements for a healthy indoor climate and low energy consumption. All units are suitable for use in both new and renovated buildings and always come preprogrammed, tested and ready to install. All you have to do is "plug & breathe".

| Air handling unit | SAVE VTC 200-1 (E)** | SAVE VTC 300 (E)** | SAVE VTC 500 (E)** | SAVE VTC 700 (E)** |
|-------------------|----------------------|--------------------|--------------------|--------------------|
|-------------------|----------------------|--------------------|--------------------|--------------------|



| Energy efficiency class             |                       |              |              |              |              |
|-------------------------------------|-----------------------|--------------|--------------|--------------|--------------|
| Standard unit                       |                       | A            | A            | A            | A            |
| Standard unit with accessories      |                       | A            | A+           | A            | A+           |
| Technical data                      |                       |              |              |              |              |
| Design up to living space           | m <sup>2</sup>        | 180          | 240          | 400          | 550          |
| Qref at 50 Pa                       | l/s m <sup>3</sup> /h | 56/200       | 71/255       | 117/421      | 166/599      |
| Qmax at 100 Pa                      | l/s m <sup>3</sup> /h | 79/285       | 101/364      | 167/602      | 237/856      |
| Sound power level (LwA)             | dB(A)                 | 47           | 40           | 44           | 41           |
| Efficiency heat recovery            | %                     | 84/83 (E)**  | 86/83 (E)**  | 84/81 (E)**  | 87/79 (E)**  |
| Filter, Supply air                  |                       | F7/ePM1 60%  | F7/ePM1 60%  | F7/ePM1 60%  | F7/ePM1 60%  |
|                                     |                       | F8/ePM1 70%* | F8/ePM1 70%* | F8/ePM1 70%* | F8/ePM1 70%* |
| Filter, Extract air                 |                       | M5/ePM10 50% | M5/ePM10 50% | M5/ePM10 50% | M5/ePM10 50% |
| Duct connections                    | mm                    | 125          | 160          | 200          | 250          |
| Max. power, fan(s)                  | W                     | 81           | 85           | 169          | 170          |
| Electrical heater                   | W                     | -            | 1670*        | 1670*        | 4500*        |
| Recommended fuse                    | A                     | 10           | 10           | 13           | 10           |
| Width (with connection box)         | mm                    | -            | -            | -            | -            |
| Width (without connection box)      | mm                    | 598          | 762          | 880          | 1170         |
| Height (with connection box)        | mm                    | 629          | 883          | 880          | 1250         |
| Height (without connection box)     | mm                    | 550          | 800          | 800          | 1175         |
| Depth                               | mm                    | 550          | 615          | 615          | 860          |
| Weight                              | kg                    | 47           | 72           | 82           | 151          |
| Isolation of casing                 | mm                    | 30           | 30           | 30           | 30           |
| Condensate connection               |                       | 1/2" (2x)    | 1/2" (2x)    | 1/2" (2x)    | 1/2" (2x)    |
| Application                         |                       |              |              |              |              |
| Flats                               |                       | •            |              |              |              |
| Single-family house                 |                       | •            | •            | •            |              |
| Apartment building, centrally       |                       |              |              |              | •            |
| Light commercial                    |                       |              | •            | •            | •            |
| Built in cooker hood                |                       |              |              |              |              |
| Connection for external cooker hood |                       |              |              |              |              |

\* Available as accessories.

\*\* Enthalpy version.



|                    |                    |                    |                |                |                |
|--------------------|--------------------|--------------------|----------------|----------------|----------------|
| SAVE VSC 100 (E)** | SAVE VSC 200 (E)** | SAVE VSC 300 (E)** | SAVE VTR 100/B | SAVE VTR 150/B | SAVE VTR 150/K |
|--------------------|--------------------|--------------------|----------------|----------------|----------------|

| A            | A            | A            | A            | A            | A            | A            | A            |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| A+           | A            | A            | A            | A            | A            | A            | A            |
|              |              |              |              | Right        | Left         | Right        | Left         |
| 100          | 200          | 320          | 100          | 115          | 115          | 115          | 115          |
| 32/116       | 65/233       | 99/358       | 29/106       | 50/181       | 54/195       | 50/181       | 54/195       |
| 46/166       | 93/333       | 142/511      | 41/151       | 72/258       | 77/278       | 72/258       | 77/278       |
| 36           | 45           | 46           | 42           | 41           | 43           | 41           | 43           |
| 86/85 (E)**  | 89/83 (E)**  | 85/79 (E)**  | 85           | 79           | 79           | 79           | 79           |
| F7/ePM1 60%  | F7/ePM1 60%  | F7/ePM1 60%  | F7/ePM1 60%  | F7/ePM1 60%  | F7/ePM1 60%  | F7/ePM1 60%  | F7/ePM1 60%  |
| F8/ePM1 70%* | F8/ePM1 70%* | F8/ePM1 70%* | F8/ePM1 70%* | F8/ePM1 70%* | F8/ePM1 70%* | F8/ePM1 70%* | F8/ePM1 70%* |
| M5/ePM10 50% | M5/ePM10 50% | M5/ePM10 50% | M5/ePM10 50% | M5/ePM10 50% | M5/ePM10 50% | M5/ePM10 50% | M5/ePM10 50% |
| 125          | 125          | 160          | 125          | 125          | 125          | 125          | 125          |
| 27           | 81           | 119          | 35           | 81           | 81           | 81           | 81           |
| -            | -            | -            | 250*         | 500/1000     |              | 500/1000     |              |
| 10           | 10           | 10           | 10           | 10           | 10           | 10           | 10           |
| 1263         | 1473         | 1473         | -            | -            | -            | -            | -            |
| 1220         | 1430         | 1430         | 561          | 596          | 596          | 596          | 596          |
| -            | -            | -            | 679          | 707          | 707          | 800          | 800          |
| 258          | 328          | 355          | 600          | 630          | 630          | 720          | 720          |
| 640          | 750          | 840          | 322          | 368          | 368          | 465          | 465          |
| 47           | 70           | 80           | 39           | 46           | 46           | 61           | 61           |
| 20           | 20           | 20           | 30           | 30           | 30           | 30           | 30           |
| 1/2" (2x)    | 1/2" (2x)    | 1/2" (2x)    | -            | -            | -            | -            | -            |
| •            | •            |              | •            | •            | •            | •            | •            |
|              | •            | •            |              | •            | •            | •            | •            |
|              |              | •            |              |              |              |              |              |
|              |              |              | •            | •            | •            | •            | •            |
|              |              |              |              |              |              |              |              |



| Air handling unit | SAVE VTR 275/B | SAVE VTR 350/B | SAVE VTR 500 | SAVE VTR 700 |
|-------------------|----------------|----------------|--------------|--------------|
|-------------------|----------------|----------------|--------------|--------------|

#### Energy efficiency class

|                                |   |   |   |    |
|--------------------------------|---|---|---|----|
| Standard unit                  | A | A | A | A  |
| Standard unit with accessories | A | A | A | A+ |

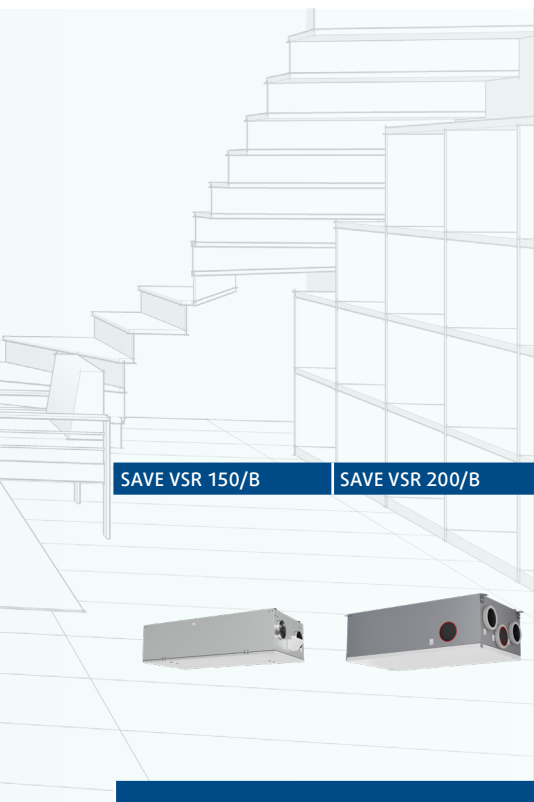
#### Technical data

|                                 |                       |              |              |              |              |
|---------------------------------|-----------------------|--------------|--------------|--------------|--------------|
| Design up to living space       | m <sup>2</sup>        | 200          | 300          | 400          | 550          |
| Qref at 50 Pa                   | l/s m <sup>3</sup> /h | 61/221       | 98/353       | 111/400      | 185/666      |
| Qmax at 100 Pa                  | l/s m <sup>3</sup> /h | 88/316       | 140/504      | 159/571      | 264/951      |
| Sound power level (LwA)         | dB(A)                 | 40           | 44           | 46           | 41           |
| Efficiency heat recovery        | %                     | 79           | 82           | 84           | 82           |
| Filter, Supply air              |                       | F7/ePM1 60%  | F7/ePM1 60%  | F7/ePM1 60%  | F7/ePM1 60%  |
|                                 |                       | F8/ePM1 70%* | F8/ePM1 70%* | F8/ePM1 70%* | F8/ePM1 70%* |
| Filter, Extract air             |                       | M5/ePM10 50% | M5/ePM10 50% | M5/ePM10 60% | M5/ePM10 50% |
| Duct connections                | mm                    | 125          | 160          | 200          | 250          |
| Max. power, fan(s)              | W                     | 81           | 169          | 170          | 170          |
| Electrical heater               | W                     | 500/1000     | 1670         | 1670         | 1670*        |
| Recommended fuse                | A                     | 10           | 13           | 13           | 13           |
| Width (with connection box)     | mm                    | -            | -            | -            | -            |
| Width (without connection box)  | mm                    | 598          | 762          | 920          | 1170         |
| Height (with connection box)    | mm                    |              | 878          | 885          | 1250         |
| Height (without connection box) | mm                    | 580          | 802          | 800          | 1175         |
| Depth                           | mm                    | 450          | 490          | 584          | 860          |
| Weight                          | kg                    | 46           | 66           | 85           | 188          |
| Isolation of casing             | mm                    | 30           | 30           | 30           | 30           |
| Condensate connection           |                       | -            | -            | -            | 1/2"         |

#### Application

|                                     |   |   |   |   |
|-------------------------------------|---|---|---|---|
| Flats                               | • |   |   |   |
| Single-family house                 | • | • | • |   |
| Apartment building, centrally       |   |   |   | • |
| Light commercial                    |   | • | • | • |
| Built in cooker hood                |   |   |   |   |
| Connection for external cooker hood | • | • |   |   |

\*Available as accessories.



| SAVE VSR 150/B | SAVE VSR 200/B | SAVE VSR 300 | SAVE VSR 400 | SAVE VSR 500 | SAVE VSR 700 |
|----------------|----------------|--------------|--------------|--------------|--------------|
|----------------|----------------|--------------|--------------|--------------|--------------|



| A            | A            | A            | A            | A            | A            |
|--------------|--------------|--------------|--------------|--------------|--------------|
| A            | A            | A            | A            | A            | A+           |
| 100          | 180          | 240          | 400          | 400          | 500          |
| 33/118       | 55/199       | 71/257       | 119/430      | 118/426      | 169/609      |
| 48/168       | 79/284       | 102/367      | 170/615      | 168/608      | 242/870      |
| 35           | 43           | 43           | 45           | 53           | 44           |
| 85           | 83           | 85           | 83           | 84           | 83           |
| F7/ePM1 60%  | F7/ePM1 60%  | F7/ePM1 60%  | F7/ePM1 60%  | F7/ePM1 60%  | F7/ePM1 60%  |
| F8/ePM1 70%* | F8/ePM1 70%* | F8/ePM1 70%* | F8/ePM1 70%* | F8/ePM1 70%* | F8/ePM1 70%* |
| M5/ePM10 50% | M5/ePM10 50% | M5/ePM10 50% | M5/ePM10 50% | M5/ePM10 50% | M5/ePM10 50% |
| 125          | 125          | 160          | 200          | 200          | 250          |
| 35           | 81           | 81           | 169          | 169          | 170          |
| 500          | 1000         | 1670         | 1670         | 1670         | 1670         |
| 10           | 10           | 10           | 13           | 13           | 13           |
| 1215         | 1215         | 1177         | 1280         | 1177         | 1480         |
| 1150         | 1172         | 1150         | 1200         | 1150         | 1400         |
| -            | -            | -            | -            | -            | -            |
| 303          | 350          | 595          | 680          | 645          | 710          |
| 586          | 620          | 505          | 510          | 595          | 748          |
| 49           | 56           | 65           | 80           | 77           | 120          |
| 30           | 30           | 50           | 50           | 50           | 50           |
| -            | -            | -            | -            | -            | -            |
| •            | •            |              |              |              |              |
|              | •            | •            | •            | •            |              |
|              |              | •            | •            | •            | •            |
| •            | •            |              |              |              |              |

Systemair around the globe



3

Distribution Centers

50

Countries with Sales Subsidiaries



Always  
close to you!

