

# 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 ...

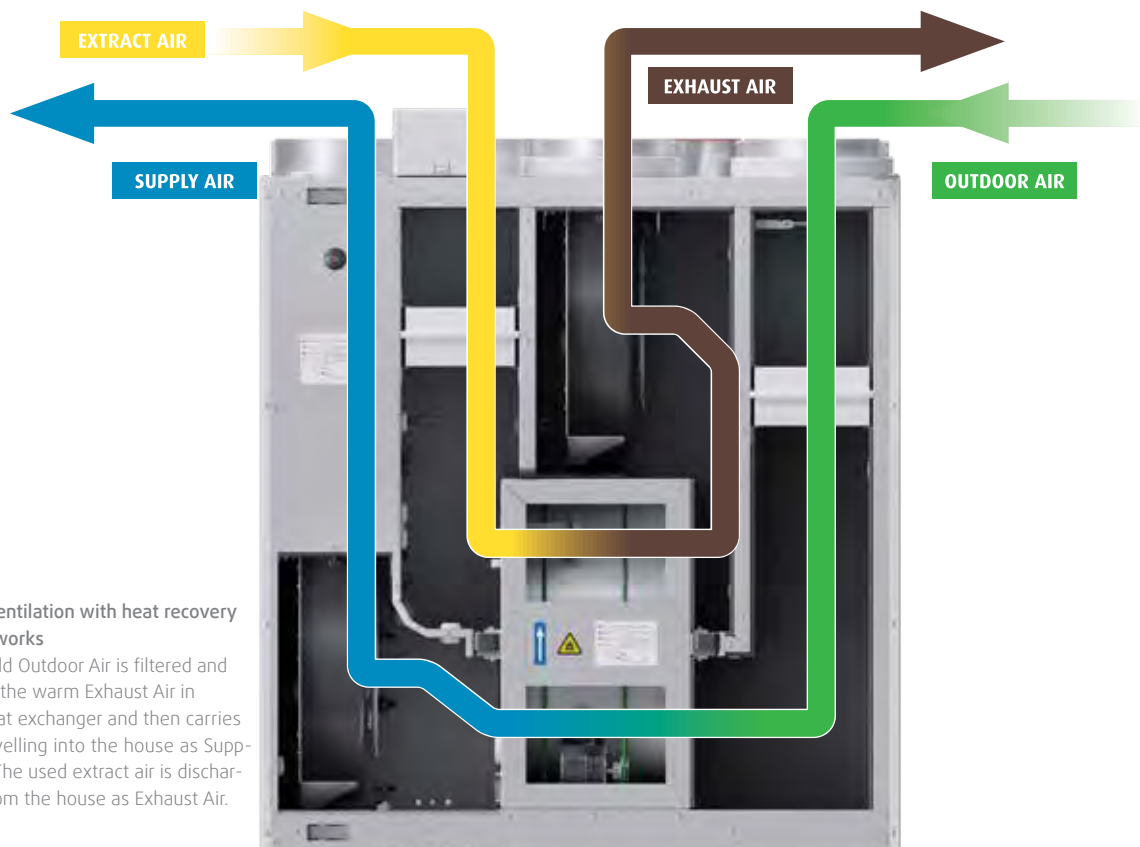
... but far too frequently, the air in our homes is even worse than the air out on the street. Research and studies show that in our major cities, there can be as much as 2 to 10 times\* more contaminated air indoors than outdoors. In turn, this can lead to asthma, allergies and even lung cancer. Quite 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Elevated radon values in indoor air can be traced directly back to outdated ventilation solutions that are incapable of removing contaminated air from the home.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.

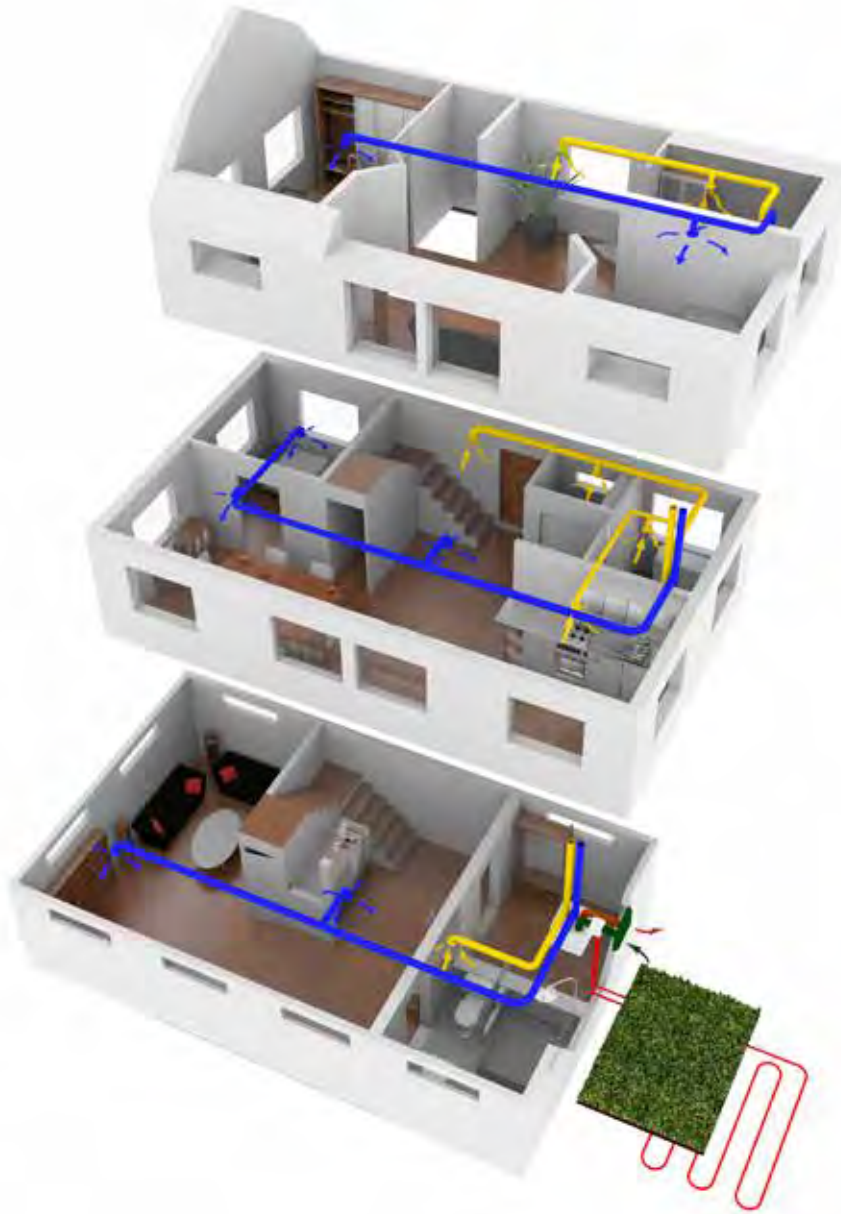
The United States EPA ranks indoor air quality as a top five environmental risk to public health. EPA studies found indoor air pollutants were generally 2 to 5 times greater than outdoor pollution levels. In some cases, indoor air pollution was 100 times greater.

5<sup>th</sup>



# Quality of life starts with the climate

## Residential ventilation by Systemair

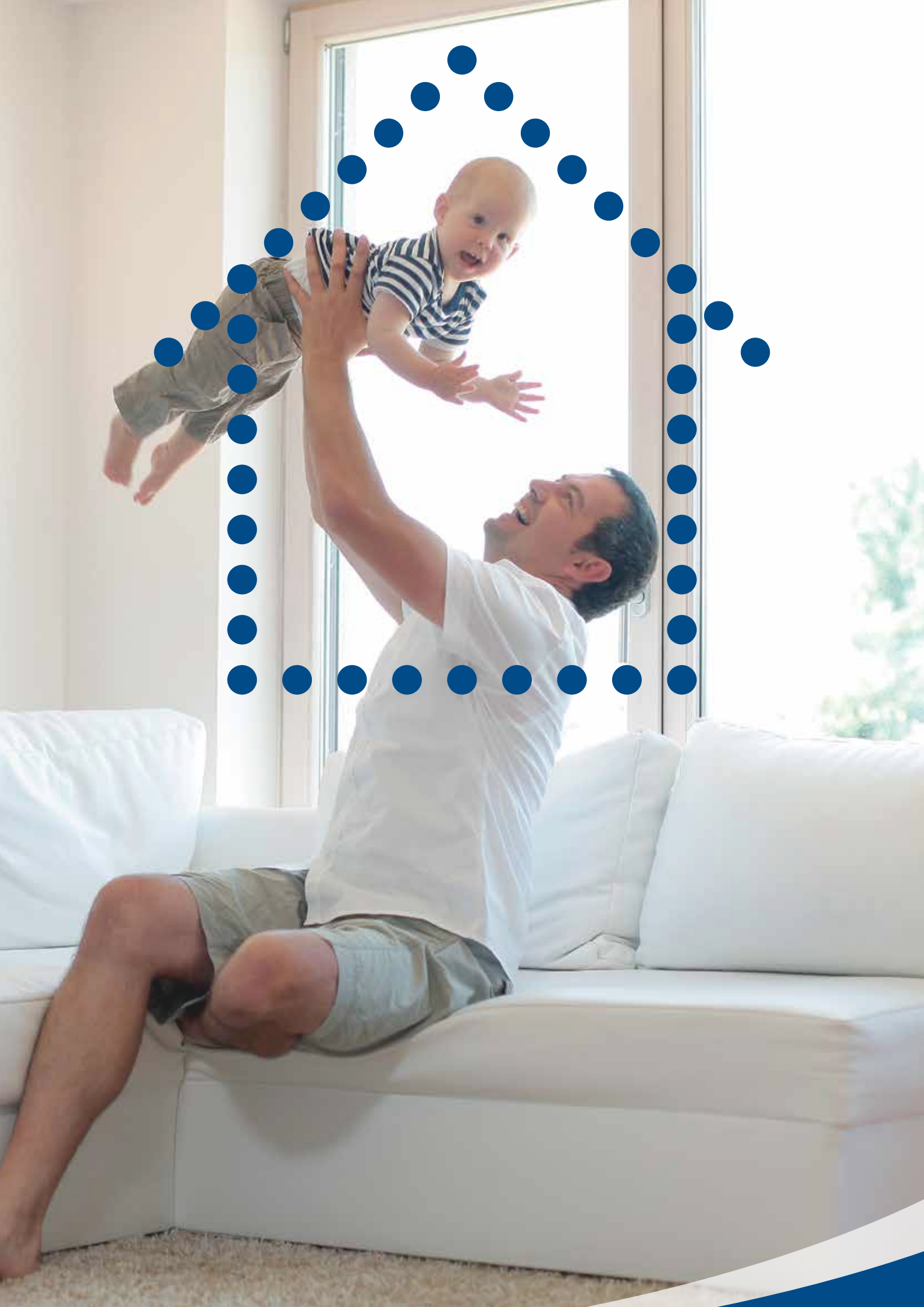


### **This is how your controlled residential ventilation works:**

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-tempers 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.  $-30^{\circ}\text{C}$ )

## 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.

### The benefits:

- Controlled outdoor air and ventilation
- Heat recovery degree of up to 90%
- 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.



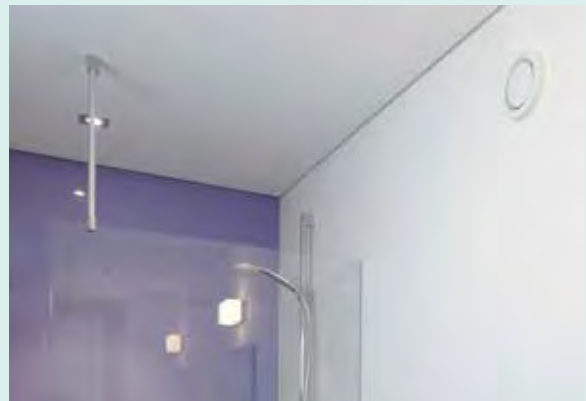
## Systemair air distribution products

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:

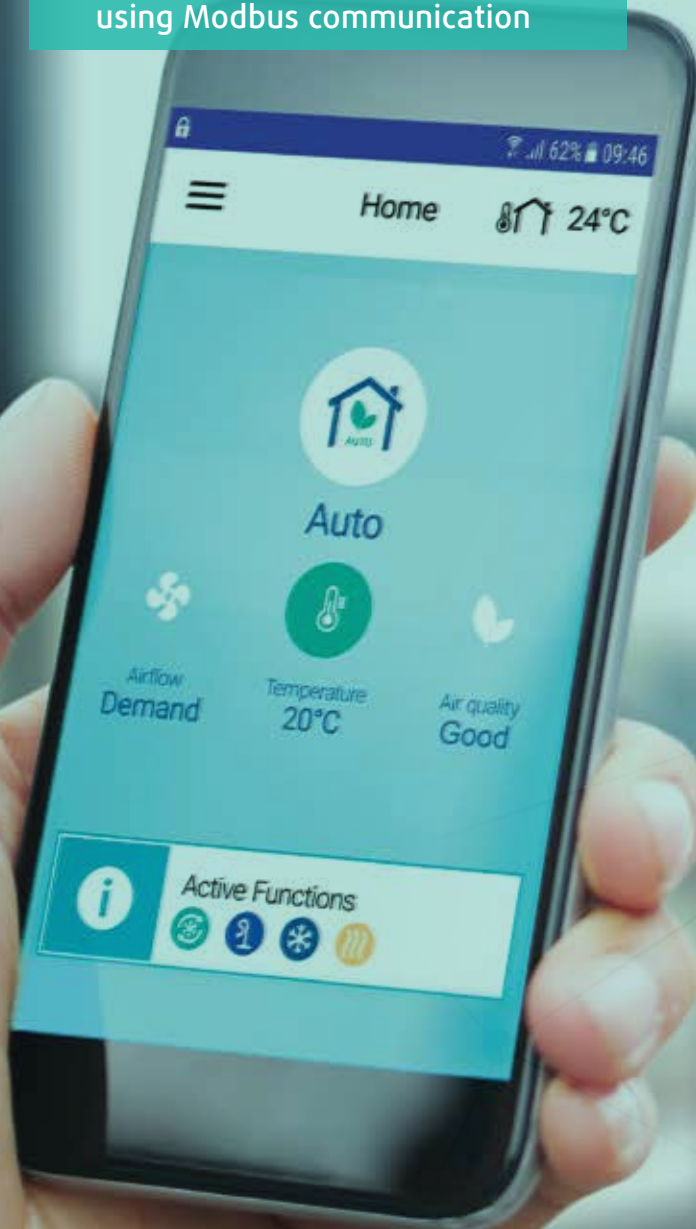
- Start up wizard
- Flexible and freely configurable
- Selection of user interfaces:
  - SAVE TOUCH
  - SAVE LIGHT
  - SAVE CONNECT
- External Connection Board
- Integrated support for BMS/SCADA using Modbus communication

The SAVE control system is the common platform for all SAVE models.

The Connection Board simplifies installation of external devices - heating/cooling equipment, cooker-hoods, sensors for Indoor Air Quality control, smoke or fire sensors for safety. We have you covered for all cases!

The SAVE control system offers a variety of different control interfaces to fit the needs of every customer. A combination of up to 10 control panels can be used.

The panels can also be used in combination with one another. The SAVE TOUCH control panel is ideal for advanced uses and the SAVE LIGHT is ideal for basic control functions. SAVE CONNECT enables both remote control and monitoring of the SAVE unit and provides the option for easier configuration by uploading configuration files stored in it or in your mobile device.



### 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.



### Homesolutions Customer Portal

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



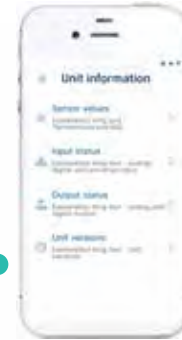
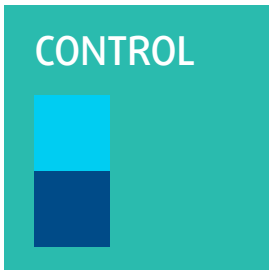
### Mobile APP (Remote control)

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.



### Smart Home integrations

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



### 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



### Homesolutions 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.



### SAVE CONNECT 2.0

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



### 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.

# 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	SAVE VTC 300	SAVE VTC 500	SAVE VTC 700
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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	86	84	87
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	85	85	169	170
Electrical heater	W	-	1670*	1670*	4500*
Recommended fuse	A	10	10	13	10
Width (with connection box)	mm	-	762	880	1170
Width (without connection box)	mm	598	-	-	-
Height (with connection box)	mm	-	883	880	1250
Height (without connection box)	mm	550	800	800	1175
Depth	mm	550	615	615	860
Weight	kg	47	72	82	160
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					

\*Available as accessories.



Experience Systemair solutions in an unprecedented way with HVAC PRODUCTS – brand-new, web-based Augmented Reality platform. Please scan the scannable code on your mobile device to visit [experience.systemair.com](http://experience.systemair.com).

SAVE VSC 100	SAVE VSC 200	SAVE VSC 300
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A	A	A
A+	A	A
100	200	320
32/116	65/233	99/358
46/166	93/333	142/511
36	45	46
86	89	85
F7/ePM1 60%	F7/ePM1 60%	F7/ePM1 60%
F8/ePM1 70%*	F8/ePM1 70%*	F8/ePM1 70%*
M5/ePM10 50%	M5/ePM10 50%	M5/ePM10 50%
125	125	160
27	81	119
-	-	-
10	10	10
1263	1473	1473
1220	1430	1430
-	-	-
258	328	355
640	750	840
47	70	80
20	20	20
1/2" (2x)	1/2" (2x)	1/2" (2x)
•		
	•	•
	•	•



**Energy efficiency class**

Standard unit A B B A A

Standard unit with accessories A A A A A

Technical data	SAVE VTR100/B		SAVE VTR 150/B		SAVE VTR 150/K		SAVE VTR 250/B	SAVE VTR 275/B
		Right	Left	Right	Left	Right	Left	
Design up to living space	m <sup>2</sup> 100	115	115	115	115	200	200	
Qref at 50 Pa	l/s m <sup>3</sup> /h 29/106	50/181	54/195	50/181	54/195	60/215	61/221	
Qmax at 100 Pa	l/s m <sup>3</sup> /h 41/151	72/258	77/278	72/258	77/278	85/307	88/316	
Sound power level (LwA)	dB(A) 42	41	43	41	43	38	40	
Efficiency heat recovery	% 85	76	76	76	76	81	79	
Filter, Supply air	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%*
Filter, Extract air	M5/ePM10 50%	M5/ePM10 50%	M5/ePM10 50%	M5/ePM10 50%	M5/ePM10 50%	M5/ePM10 60%	M5/ePM10 50%	
Duct connections	mm 125	125	125	125	125	125	125	
Max. power, fan(s)	W 35	81	81	81	81	81	81	
Electrical heater	W 250*	500/1000		500/1000		500/1000		500
Recommended fuse	A 10	10	10	10	10	10	10	
Width	mm 561	596	596	596	596	598	598	
Height (with connection box)	mm 679	707	707	800	800	880		
Height (without connection box)	mm 600	630	630	720	720	800	580	
Depth	mm 322	368	368	465	465	490	450	
Weight	kg 39	46	46	61	61	56	49	
Isolation of casing	mm 30	30	30	30	30	30	30	
Condensate connection	-	-	-	-	-	-	-	

**Application**

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

\*Available as accessories.





SAVE VTR 300/B	SAVE VTR 500	SAVE VTR 700	SAVE VSR 150/B	SAVE VSR 200/B	SAVE VSR 300	SAVE VSR 500
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A	A	A	A	A	A	A
A	A	A+	A	A	A	A
240	400	550	100	180	240	400
68/246	111/400	185/666	33/118	55/199	71/257	118/426
97/351	159/571	264/951	48/168	79/284	102/367	168/608
39	46	41	36	43	42	53
85	84	81	85	83	85	84
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%*
M5/ePM10 50%	M5/ePM10 60%	M5/ePM10 50%	M5/ePM10 50%	M5/ePM10 50%	M5/ePM10 50%	M5/ePM10 50%
160	200	250	125	125	160	200
81	170	170	35	81	81	169
1670	1670	1670*	500	1000	1670	1670
10	13	13	10	10	10	13
762	920	1170	1150	1215	1150	1150
878	885	1250	303	350	595	645
802	800	1175	303		595	645
491	584	860	586	620	505	595
70	85	188	58	56	65	77
30	30	30	30	30	50	50
-	-	1/2"	-	-	-	-


Systemair around the globe



3

Distribution Centers

50

Countries with Sales Subsidiaries



27

Production Facilities

Always  
close to you!



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