

# Enervent ventilation

SYSTEMS FOR DOMESTIC INDOOR CLIMATE



***enervent***



## Health

*The health aspect of Enervent ventilation is substantial. Our mechanical supply and extract air system ensures a fresh and healthy indoor climate regardless of external conditions.*

### **Fresh and filtered indoor air**

Fine particles are a major environmental health hazard. The most significant sources of fine particles are traffic, industry and energy production.

Fine particles cause respiratory diseases, cardiovascular diseases and cancer. Increased disease burden and premature deaths has been estimated to cause Nordic societies economic losses of about 3.5% of gross domestic product.

We can dramatically reduce pollution of the indoor air with Enervent ventilation.

The benefits with Enervent ventilation are amongst others:

- it helps people with allergies and asthma by cleaning the incoming air of pollen
- it prolongs the lives of people in severely polluted areas
- it ensures healthy indoor environments in cold climates thanks to the fact that the rotating heat exchanger keeps the indoor humidity at a healthy level.

### **Healthy building**

Mechanical ventilation is also good for the building. Mechanical ventilation masters the air flows in the building and prevents structural damage.

A lot of humidity is created in residential buildings. The humidity is derived from cooking, showering,

laundry and so on. If the air flows are uncontrolled all this humidity can end up in the structures of the building causing mold and other problems.

### **Vitality from fresh air**

A good indoor climate has an overall impact on our wellbeing and our coping. Mechanical ventilation has a positive impact on our quality of sleep, concentration and overall coping.

Installing mechanical ventilation in a building with poor indoor quality is like taking a vitamin boost, you feel rested, energized and happy - all without additional chemicals.



## Comfort

*Comfort in your home is not just a cosy sofa. It is also the right indoor temperature, humidity level and soundscape. Together they form comfortable surroundings to relax and entertain in.*

### Temperature matters

The indoor temperature is crucial for our comfort. If the temperature is wrong our quality of sleep, concentration and overall coping degrades. Recommendations vary, but a suggested typical range for indoor temperature is 23-25,5°C in the summer and 20-23.5°C in winter.

Enervent offers ventilation systems that heat and cool the supply air in order to always keep the indoor temperature on the desired level. The system is totally automated, so the only thing you have to do is choose the set point.

### Humidity is a belittled phenomena

It's important to maintain the pro-

per humidity levels in your home to keep a comfortable, healthy space. Indoor humidity levels should be between 30 to 50 percent, with the ideal level being about 45 percent.

Low humidity will open you up to all of the pains that come with dry air: dry nose and throat, dry skin, and an increased risk of catching a cold.

When the humidity level is too high it can lead to stained ceilings and walls, peeled paint and wallpaper, and it can provide a nasty breeding ground for mold, rot, and insects.

Enervent ventilation systems can manage the humidity level in your home. We can dehumidify and humidify the indoor air according to

need - all via the ventilation ducts. No extra indoor units needed.

### The soundscape of your home

Noise plays a vital part in whether we feel comfortable or not. An otherwise pleasant surrounding can be ruined by too much noise.

We should pay attention to the background noise in our homes. All appliances make noise and the noise may ruin the relaxing atmosphere.

Enervent ventilation systems require no noisy indoor units. The system must always be equipped with adequate silencers in order to make sure no sound is carried to the living quarters.



## Energy efficiency

*Buildings are responsible for 40% of energy consumption and 36% of CO<sub>2</sub> emissions in the EU. Choosing Envervent ventilation systems with high energy efficiency is an environmental act!*

### Carefully chosen components

Envervent has been a leading company in developing energy efficient ventilation systems since the 1980's.

We constantly develop our products by seeking for new, even more energy efficient components. Energy efficiency and high quality are key points of interest when we choose components and suppliers for our ventilation systems.

### Heat recovery

All Envervent solutions for residential buildings are equipped with a rotating heat exchanger. The rotating heat exchanger transfers waste heat energy from the extract air to the fresh air.

The rotating heat exchanger can similarly recover coolness lowering cooling costs in the summer.

When the temperature drops below 0°C the rotating heat exchanger recovers part of the humidity in the extract air keeping the indoor humidity at a healthy level.

### Integrated heat pumps

Envervent offers a range of ventilation units with built-in extract air heat pump.

These solutions are cutting edge products when it comes to energy efficiency. The product line has double heat recovery - first the heat

is recovered by the heat pump and then with the rotating heat exchanger.

Under the right circumstances energy efficiency in these systems can be over 90 % and annual efficiency over 80 %.

Excess energy from the process can in these solutions be used to heat up water. The water can be used as domestic hot water or to heat up the building with. The system is too good to be true with a annual heat recovery efficiency over 100 %.





## Control

*Control is one of our specialities. We have developed different control systems for different needs. They are all optimized for good user experience.*

### **Enervent eAir - the crown jewel**

eAir is the most versatile of Enervent controls. eAir can control all forms of heating and cooling as well as external components like humidifiers.

Enervent eAir means intelligent control. All adjustments are made by just tapping eAir's touch-screen wireless panel.

The control is based on operation modes like Home, Away, Boost and Eco. The operation modes – different situations of your daily life – cover all the ventilation needs.

A free internet user interface, eAir web, is included in all deliveries. You can control your ventilation from all over the world.

### **Enervent eWind - a smart solution**

eWind is a cost effective version of eAir. The control is based on the eAir algorithm, but the control panel is simpler than the eAir touchscreen.

eWind can control the same functions as eAir, with the exception of air heat pumps and the features related to them.

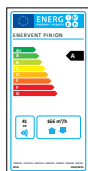
eWind is the right choice if you want cutting edge technology, but you aren't especially interested in how it works as long as it works. You can manage the central functions from the control panel, the rest is taken care of automatically. This control really gives you your money's worth.

### **Enervent ECC - simple is beautiful**

ECC control is the basic control system designed for Enervent ventilation units. The system makes the basic control of your indoor climate easy and practical.

The ECC control is a simple control for basic units. The control is only able to handle electrical after heating. No cooling can be controlled with the ECC control. The ECC control panel is clear, simple and easy to understand.

# Ventilation solutions for residential buildings



## PINION

Energy classification	A
Reference air flow	186 m <sup>3</sup> /h
Duct connections	Ø 125 mm
Standard filters	F7/M5
Width	598 mm
Depth	320 mm
Height	630 mm
Weight	60 kg
Electr. after heater	800 W
Water after heater	No
Cooling	No
Installation	Warm space



## PINGVIN

Energy classification	A
Reference air flow	224 m <sup>3</sup> /h
Duct connections	Ø 160 mm
Standard filters	M5/M5
Width	580 mm
Depth	500 mm
Height	537 mm
Weight	50 kg
Electr. after heater	400 W
Water after heater	Yes
Cooling	No
Installation	Warm space



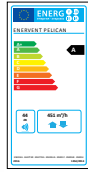
## PINGVIN XL

Energy classification	A
Reference air flow	340 m <sup>3</sup> /h
Duct connections	Ø 160 mm
Standard filters	M5/M5
Width	780 mm
Depth	555 mm
Height	540 mm
Weight	63 kg
Electr. after heater	800 W
Water after heater	Yes
Cooling	No
Installation	Warm space



## PANDION

Energy classification	A
Reference air flow	363 m <sup>3</sup> /h
Duct connections	Ø 160 mm
Standard filters	M5/M5
Width	780 mm
Depth	543 mm
Height	895 mm
Weight	90 kg
Electr. after heater	800 W
Water after heater	Yes
Cooling	Yes
Installation	Warm space



## PELICAN

Energy classification	A
Reference air flow	451 m <sup>3</sup> /h
Duct connections	Ø 200 mm
Standard filters	M5/M5
Width	998 mm
Depth	590 mm
Height	1270 mm
Weight	125 kg
Electr. after heater	2000 W
Water after heater	Yes
Cooling	Yes
Installation	Warm space



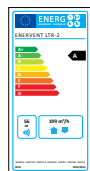
## PEGASOS

Energy classification	A
Air volum flow	140...1100 m <sup>3</sup> /h
Duct connections	Ø 250 mm
Standard filters	M5/M5
Width	1250 mm
Depth	677 mm
Height	1400 mm
Weight	203 kg
Electr. after heater	4000 W
Water after heater	Yes
Cooling	Yes
Installation	Warm space



## PEGASOS XL

Energy classification	A
Air volum flow	140...1404 m <sup>3</sup> /h
Duct connections	Ø 250 mm
Standard filters	M5/M5
Width	1250 mm
Depth	677 mm
Height	1400 mm
Weight	203 kg
Electr. after heater	4000 W
Water after heater	Yes
Cooling	Yes
Installation	Warm space



### LTR-2

Energy classification	A
Reference air flow	199 m <sup>3</sup> /h
Duct connections	Ø 125 mm
Standard filters	M5/M5
Length	972 mm
Depth	393 mm
Height	362 mm
Weight	38 kg
Electr. after heater	400 W
Water after heater	Yes
Cooling	No
Installation	Warm/cold space



### LTR-3

Energy classification	A
Reference air flow	272 m <sup>3</sup> /h
Duct connections	Ø 160 mm
Standard filters	M5/M5
Length	833 mm
Depth	480 mm
Height	510 mm
Weight	52 kg
Electr. after heater	500 W
Water after heater	Yes
Cooling	Yes
Installation	Warm/cold space



### LTR-4

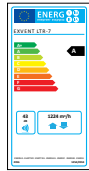
Energy classification	A
Reference air flow	367 m <sup>3</sup> /h
Duct connections	Ø 200 mm
Standard filters	F7/M5
Length	1455 mm
Depth	536 mm
Height	594 mm
Weight	85 kg
Electr. after heater	800 W
Water after heater	Yes
Cooling	Yes
Installation	Warm/cold space



### LTR-6

Energy classification	A
Reference air flow	554 m <sup>3</sup> /h
Duct connections	Ø 200 mm
Standard filters	M5/M5
Length	1200 mm
Depth	660 mm
Height	670 mm
Weight	95 kg
Electr. after heater	2000 W
Water after heater	Yes
Cooling	Yes
Installation	Warm/cold space





### LTR-7

Energy classification	A
Air volum flow	580...1 120 m <sup>3</sup> /h
Duct connections	Ø 250 mm
Standard filters	M5/M5
Length	1510 mm
Depth	707 mm
Height	720 mm
Weight	130 kg
Electr. after heater	4 000 W
Water after heater	Yes
Cooling	Yes
Installation	Warm/cold space



### LTR-7 XL

Energy classification	A
Air volum flow	620...1 400 m <sup>3</sup> /h
Duct connections	Ø 250 mm
Standard filters	M5/M5
Length	1510 mm
Depth	707 mm
Height	720 mm
Weight	130 kg
Electr. after heater	4 000 W
Water after heater	Yes
Cooling	Yes
Installation	Warm/cold space





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