

# Enervent Pinion

A SMALL, SILENT UNIT FOR APARTMENTS



***enervent***



# Enervent Pinion

The **Enervent Pinion** unit is a very silent small unit best suited for apartments and other small spaces. The unit offers multiple installation options; it can be used as a stand-alone unit or it can be installed jointly with a cooker hood. The unit and the cooker hood can either be physically connected or they can be in different spaces and connected by a duct.

The cooker hood can either be one recommended by Enervent or another suitable model. The Pinion unit can be connected to many different external controls and it makes a cost effective choice for big projects in i.e. apartment buildings.

## Cooker hood

Pinion can be connected to a variety of cooker hoods. Enervent offers its own cooker hoods **standard plus** and **premium** in addition to Frankes cooker hoods 420 and 729. Any cooker hood that fulfills the following requirements can be used with the Pinion unit.

### Physically connected with the unit

- No fan
- Hood suitable for centralized ventilation and external control
- Lights with 230 VAC supply to the hood
- Grease filter
- Fully closing damper with timer. Timer with potential free tip information that boosts ventilation when the damper is open
- Duct connection in the middle
- Electrical connections for the cooker hood lighting on the

right side of the unit (front view)

- Suitable external measurements (width and depth)
- Fastening points are suitable for the unit frame

### Connected to the unit with a duct

- No fan
- Hood suitable for centralized ventilation and external control
- Lights with 230 VAC supply to the hood
- Grease filter
- Fully closing damper with timer. Timer with potential free tip information that boosts ventilation when the damper is open

## INSTALLATION ALTERNATIVES



### Stand alone

Pinion can be used as a standard ventilation unit. In this case the cooker hood connections (on of the top of the unit and one beneath) are plugged.

The unit must be installed in a warm (over +5°C) space.



### Physically connected to a cooker hood

Pinion can be installed in the kitchen above the stove with a cooker hood attached to it. In this case the cooker hood connection on top of the unit is plugged.



### Connected to a cooker hood with a duct

Pinion can be connected to a cooker hood even though the unit is not installed in the kitchen above the stove. In this case the cooker hood connection beneath the unit is plugged.

## CONTROL SYSTEM



### eWind control system

Enervent has designed a new basic control system for its ventilation systems. The new control system is eWind and it is used with the control panel Enervent eWind.

The eWind control panel is super easy to use both for the end customer and for the installer. The control is pre-programmed at the factory for speedy installation. All settings can be managed from the control panel. No need for adjustments on the mother board.

#### Features:

- eWind control panel
- Four fan speeds
- After heating control in eight steps
- Eco mode
- Indication of filter change and maintenance need
- Humidity boosting with built-in humidity sensor
- Carbon dioxide boosting with transmitter sold as extra equipment
- Supreme sensor technology
- Can be connected to various building automations

# ADDITIONAL EQUIPMENT

## General



Design front plate



Mounting brackets for kitchen cabinet plate



Roof/wall mounting plate

## Cooker hoods



### **Enervent standard plus**

- white
- stainless steel



### **Enervent premium**

- white front list
- stainless steel front list



### **Franke 420** with active coal filter and fan

- white
- stainless steel



### **Franke 729** with active coal filter and fan

- white
- stainless steel

## eWind control



Additional control panel eWind



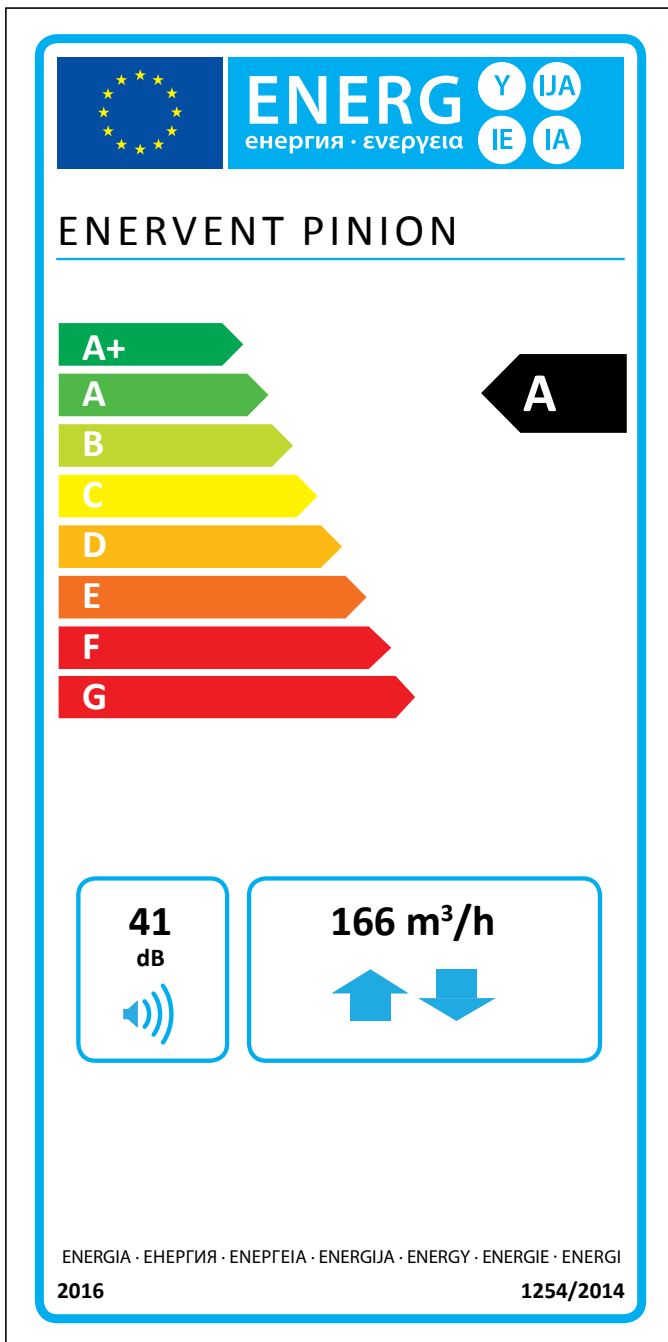
Home/away switch



Humidity transmitter



Carbon dioxide transmitter



The information on the energy label for this product has been defined with local demand control. Local demand control means that the ventilation unit continuously regulates the fan speed(s) and flow rates based on more than one sensor. Please remember to connect all local sensors (some sold as extra equipment) in order to achieve the declared energy class.

## Technical details

### General information

Reference flow rate according to EcoDesign directive (50 Pa)	186 m <sup>3</sup> /h
Air volume flow	50...241 m <sup>3</sup> /h
Pressure difference	24 to 158 Pa
Leakage	external < 5% (test pressure 300Pa) internal < 5%
Duct size	Ø 125 mm
Weight	53 kg
Standard filters, 2 x panel filter	F7/M5
Filter dimensions (WxHxD)	432 x 273 x 25 mm (F7) 280 x 124 x 46 mm (F5)
IP class	IP44 (external control IP20)
Condense connection	¼" internal thread
Nominal voltage	230 V
Nominal current	Motors 1,8 A total Electrical after heating 1.7 A

### Fans

Supply and exhaust air fan type	Ebm-Papst
Supply and exhaust air motor type	G3G146-ED23-56 (right handed unit) G3G146-ED23-06 (left handed unit)
Nominal voltage	230 V (AC), EC-type with external electronics
Type of fan blade	Radial forward
Nominal power	119 W
Acoustical data	65 dB(A) DIN 45635-1 ISO 3745
Fan control ECC/ESC control	4 step (parallel running, possibility to drive supply -20% lower to +10% higher than exhaust). Each step can be adjusted within 20% scale.

### Heat exchanger

Heat exchanger type	Rotating heat exchanger
Material	Aluminium
Heat exchanger surface	23 m <sup>2</sup>
Heat exchanger dimensions	240 x 200 (60 µ)
Heat exchanger motor	5 W
Heat exchanger efficiency	75 – 85 % p.a.

### Other information

Material inside cover	Steel sheet, zinc coated
Material outside cover	Steel sheet, zinc coated, powder painted
Standard electric after heater efficiency	400 W
Standard electrical pre-heater (Arctic models)	800 W

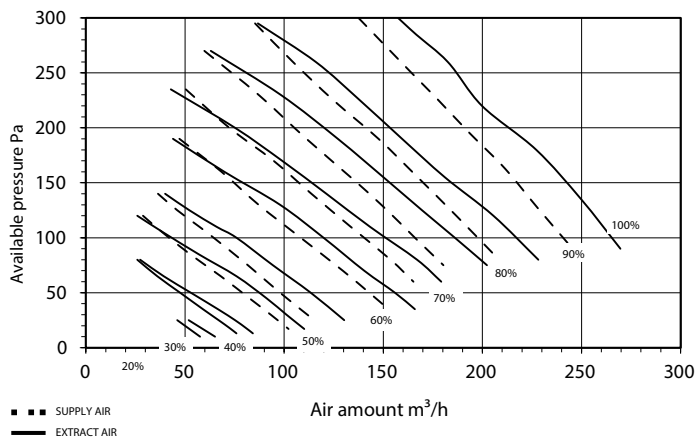
### Sound levels

	L <sub>w</sub>	L <sub>wA</sub>
Supply air duct	74,6 dB	64,7 dB(A)
Outside air duct	63,1 dB	54,7 dB(A)
Extract air duct	62,5 dB	50,9 dB(A)
Exhaust air duct	62,5 dB	52,0 dB(A)
Through casing	52,8 dB	41,2 dB(A)
-> 10 m <sup>2</sup> absorption L <sub>pA</sub>	37,2 dB(A)	



## Characteristics

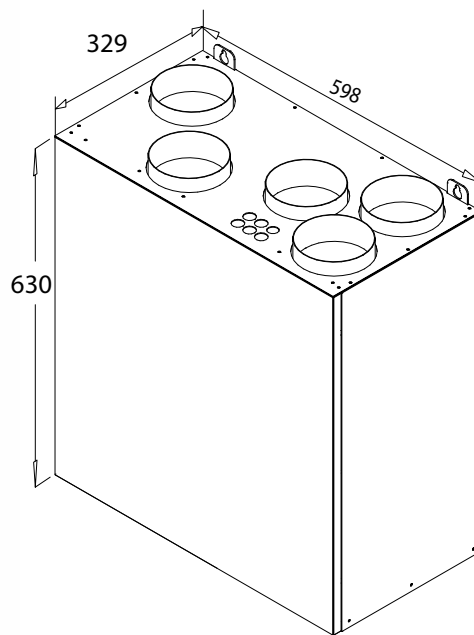
Pinion supply and extract air characteristic curves with F7/M5 filters



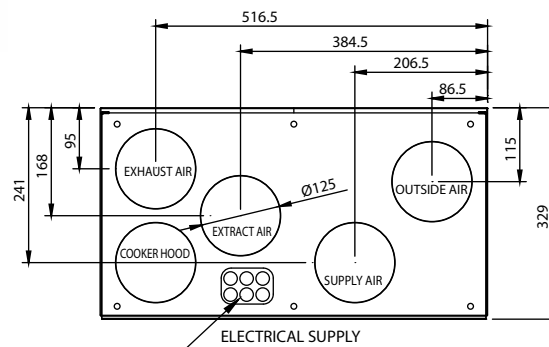
## Installation

Mounting	Wall	X	Ceiling	X
Frame alternatives	Right	X	Left	X

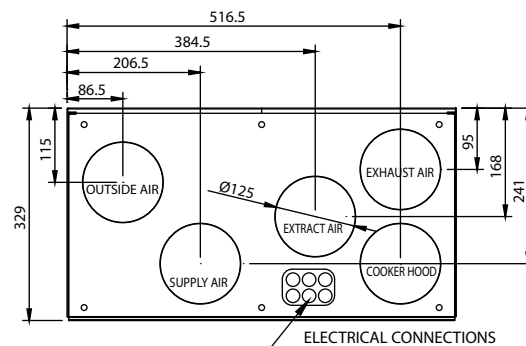
## Dimension drawings



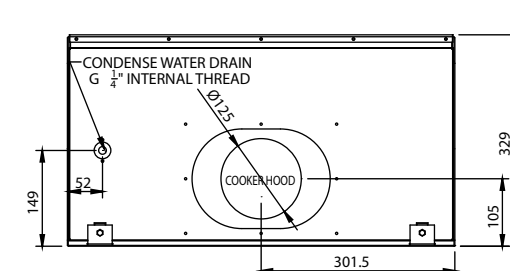
RIGHT



LEFT



BOTTOM



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