

Ventilation statement

The Goat, Ponders End

5th March 2020

The windows to all flats will be openable to allow for natural ventilation.

To allow future residents the option not to open their windows we will install in each apartment a COUNTER-FLOW, HIGH-EFFICIENCY HEAT RECOVERY UNIT DOMEO 210 Series to service all rooms in each apartment.

The manufacturer's specification note:

This is a whole house heat recovery unit with a high-efficiency heat exchanger up to 92% setting and very low consumption EC motor. Provides a constant supply of fresh tempered air into the living spaces of a house. Domeo can communicate with home automation system via Modbus or other gateway protocols. It also enables management of a pre-heating or post heating electric battery. To optimise energy consumption and air quality, it can be connected to a CO2 or humidity sensor.

The data sheet is attached.



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To optimise energy consumption and air quality, it can be connected to a CO₂ or humidity sensor and others.

Domeo 210 is fitted with a 100% bypass and it is equipped with M5 or F7 filters at the inlet and with G4 filters at the outlet to protect the heat exchanger.

Includes remote control, allowing adjustment of boost (in RD and APP), by-pass and reset of clogged filters.

Versions:

- DOMEO 210 FL 3V EU: Wired remote control. 3 speeds.
- DOMEO 210 RD: Wireless remote control (by radiofrequency). Constant airflow motor.
- DOMEO 210 APP: Remote Control by smartphone app. Constant airflow motor.

Features

- Counter-flow heat exchanger with up to 92% thermal efficiency
- Low-consumption EC motor
- Centrifugal backward curved impeller
- Modbus communication
- EPP body
- Nozzles Ø125 mm
- 100% automatic or manual bypass
- Manual boost mode (RD and APP models)
- Inlet filter:
 - M5 (ISO ePM10 50%, at 210 m³/h).
 - Option, F7 (ISO ePM1 65%, at 210 m³/h).
- Extraction filter G4 (ISO coarse 65%, at 210 m³/h).



DOMEO 210 FL 3V

Specific applications



Single dwellings

Multi dwelling blocks

Heat recovery unit



Controller.

Remote control included in the product
 Allows regulation of:

- Boost function (RD and APP models)
- By-pass
- Polluted filters alarm
- Unoccupied mode (RD and APP models)



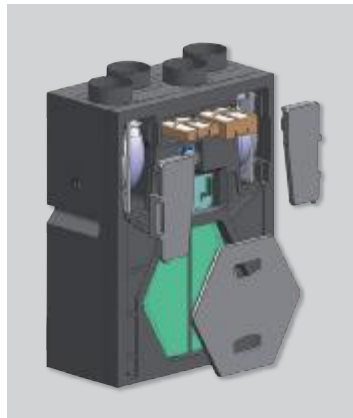
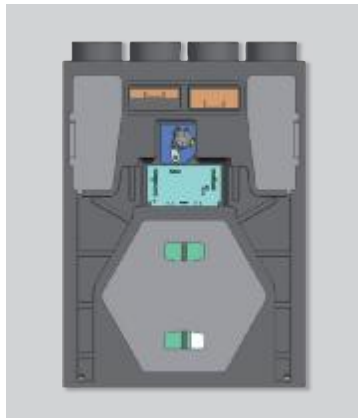
Very compact.

Minimum width and depth.

EASY MAINTENANCE



Easy access to filters.

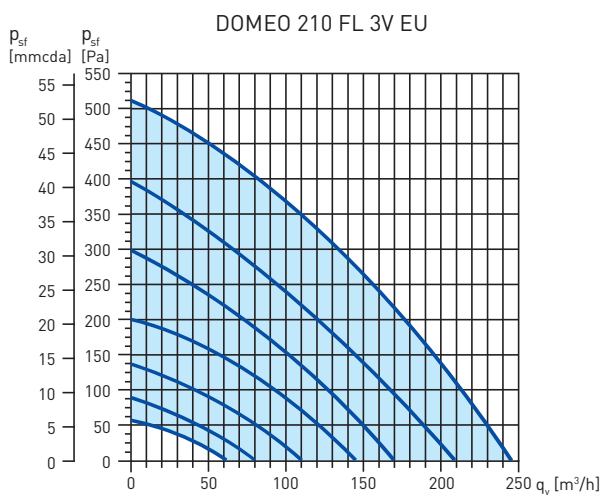


Easy to access: fans, heat exchanger and by-pass.

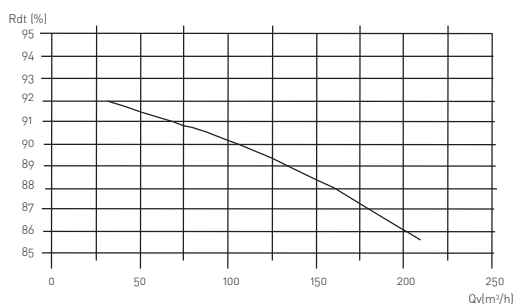
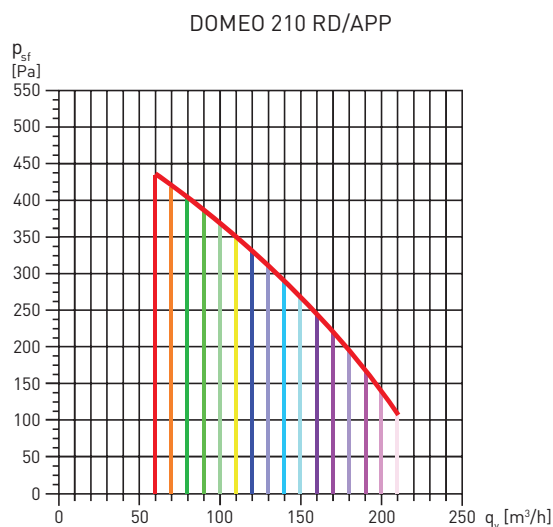
TECHNICAL CHARACTERISTICS

| Model | Efficiency (%) | Voltage (V) | Maximum airflow a 100 Pa (m ³ /h) | Sound pressure level at 1,5 m (120 m ³ /h - 70 Pa) | Absorbed power (W) |
|--------------------|----------------|-------------|--|---|--------------------|
| DOME0 210 FL 3V EU | 92 | 230 | 210 | 38,8 | 100 |
| DOME0 210 RD | 92 | 230 | 210 | 38,8 | 100 |
| DOME0 210 APP | 92 | 230 | 210 | 38,8 | 100 |

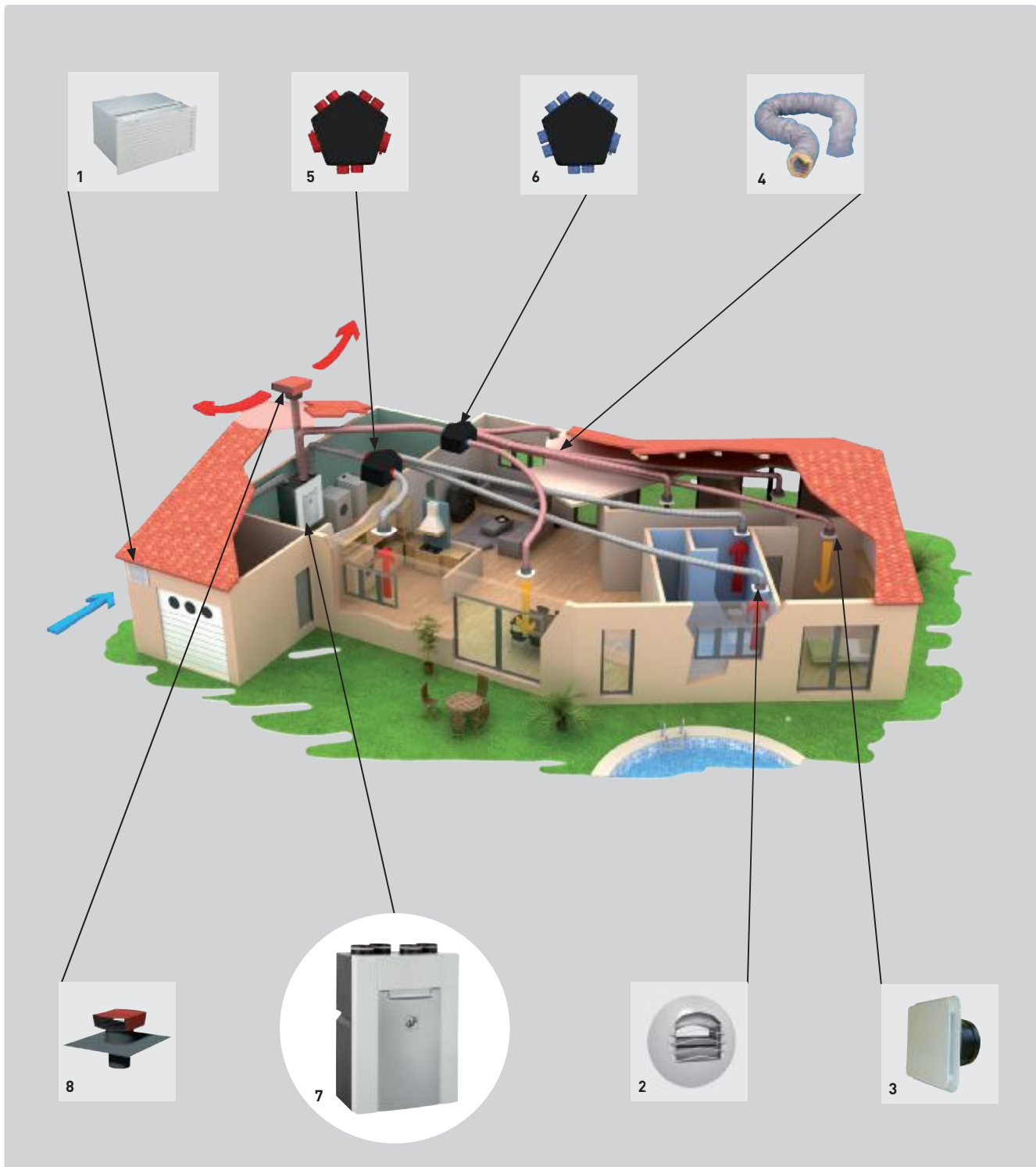
PERFORMANCE CURVES



Area of adjustable speed

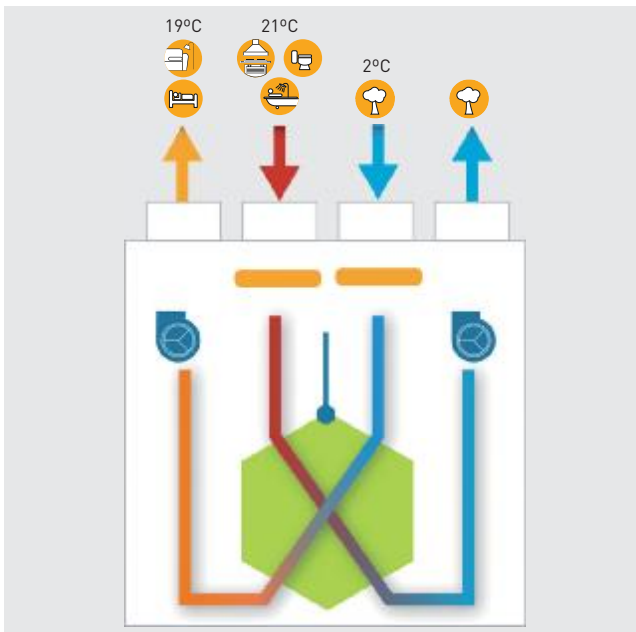


DOMEO 210 SERIES - CENTRALISED COUNTER-FLOW SYSTEM



1. Air inlet grille TAP.
2. Self-adjusting extraction valve BARJ / BARP.
3. Supply and extraction valve BDOP.
4. PVC or rectangular plastic ducts.
5. Extraction plenum.
6. Supply plenum.
7. DOMEO 210: Counter-flow, high-efficiency heat recovery unit.
8. CT Roof termination.

EXAMPLE OF HEAT RECOVERY IN WINTER

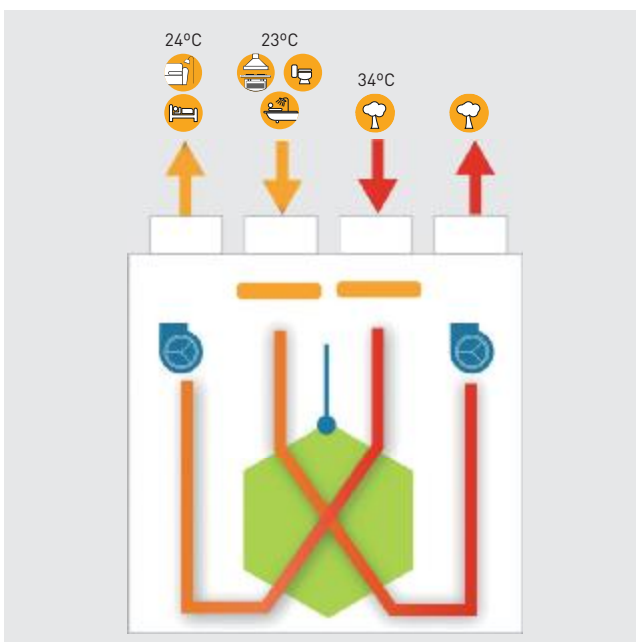


Operation without bypass

- Air inside home: 21°C.
- Outdoor air: 2°C.

New air heated and blown into home: 19°C.
With a mechanical extract ventilation system, the new air would enter at 2°C through the air inlets, decreasing the temperature inside home. With the energy recovery ventilation systems, the new air would enter at 19°C.

EXAMPLE OF HEAT RECOVERY IN SUMMER DURING DAYTIME

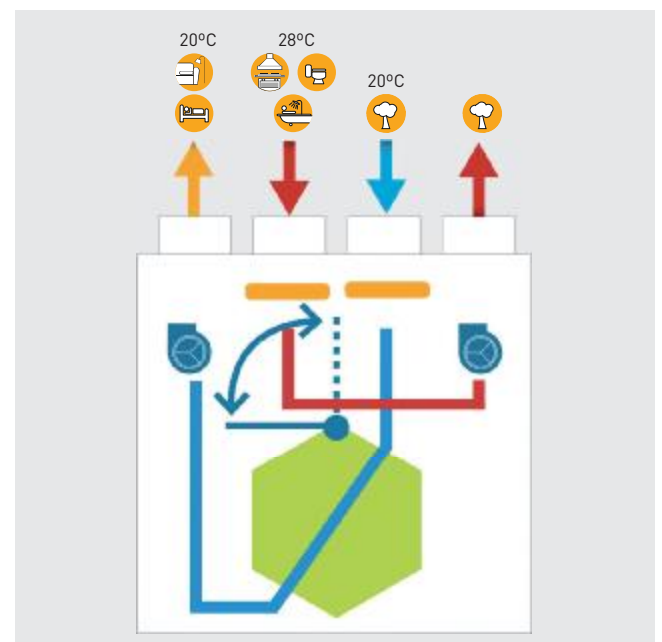


Operation with bypass

- Air inside home: 23°C.
- Outdoor air: 34°C.
- New air heated and blown into home: 24°C.

With a mechanical extract ventilation system, the new air would enter at 34°C through the air inlets, increasing the temperature inside home. With the energy recovery ventilation systems, the new air would enter at 24°C and it will avoid the rising of interior temperature.

EXAMPLE OF HEAT RECOVERY IN SUMMER NIGHTS (FREE COOLING)



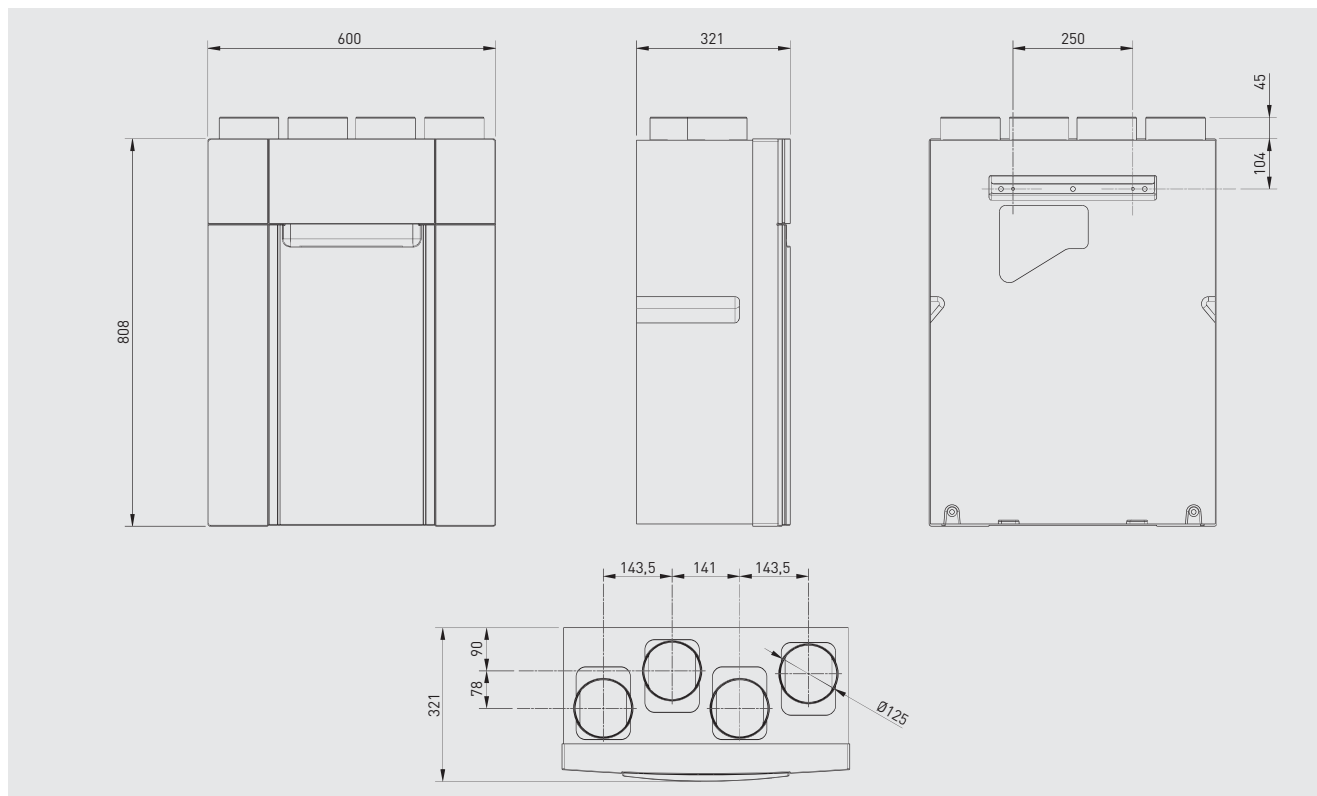
Operation with bypass

- Air inside home: 28°C.
- Outdoor air: 20°C.
- New air heated and blown into home: 20°C.

In addition, during summer nights, when outdoor air is colder than indoor air, the bypass is activated automatically so airflows do not cross each other.



DIMENSIONS (mm)



MOUNTING ACCESSORIES



KIT M5/G4 DOME0
 Pack of M5 and G4 spare filters.



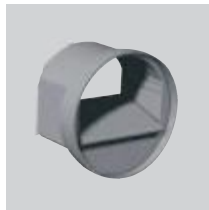
BARJ BARP
 Self-adjusting calibrated extraction valves.



BDOP
 Supply and extraction valve.



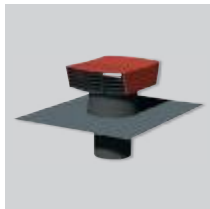
RDR
 Self-adjusting damper (50-250 Pa) that, fitted inside the duct, maintains constant airflow.



RD BP
 Specific low-pressure (20-100 Pa) and self-adjusting damper with sleeve to fit directly into the duct. 80mm diameter. Airflow: 15 or 30 m³/h.



RD BP SM
 Specific low-pressure (20-100 Pa) and self-adjusting damper without sleeve to fit directly into the sleeve of the BDOP. 80mm diameter. Airflow: 15 or 30 m³/h.



CT
 Roof cowl.



ADRF 100/80
 Reduction to connect rigid duct to spigots for flexible ducts.



GPR-ISO
 Insulated rigid duct.



GP GPX GP-PRO GP-ISO
 insulated PVC ducts .



TUBPLA V TUBPLA
 Self-extinguishing rectangular ducts with or without gasket.



TAT
 Air inlet grille under roof.



TAP
 Wall mounted air inlet grille.



PAF
 Wall outlet grille.



PLENUM UNI EXT 6+1
 Insulated extraction plenum of 125/150-160mm diameter, 1 Kitchen spigot of 125mm diameter and up to 6 sanitary spigots of 80mm diameter.



PLENUM UNI IMP 8
 Insulated supply plenum of 125/150-160mm diameter and up to 8 spigots for dry areas (living room, dining room, bathrooms) of 80mm diameter.

ELECTRICAL ACCESSORIES



HIG-2
 Humidity sensor.



SQA
 Air quality sensor.